# O ICOM

# SERVICE MANUAL

DUAL BAND FM TRANSCEVER	3
IC-E2820	

S-14326XZ-C1 Apr. 2007

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Icom Inc.

#### INTRODUCTION

This service manual describes the latest service information for the IC-E2820 DUAL BAND FM TRANSCEVER at the time of publication.

MODEL	VERSION
IC-E2820	EUR-01
10-62020	EUR-02

To upgrade quality, any electrical or mechanical parts and internal circuits are subject to change without notice or obligation.

#### **CAUTION**

**NEVER** connect the transceiver to an AC outlet or to a DC power supply that uses more than 15 V. This will ruin the transceiver.

DO NOT expose the transceiver to rain, snow or any liquids.

**DO NOT** reverse the polarities of the power supply when connecting the transceiver.

**DO NOT** apply an RF signal of more than 20 dBm (100 mW) to the antenna connectors. This could damage the transceiver's front end.



#### **ORDERING PARTS**

Be sure to include the following four points when ordering replacement parts:

- 1. 10-digit order numbers
- 2. Component part number and name
- 3. Equipment model name and unit name
- 4. Quantity required

#### <SAMPLE ORDER>

 1110003491
 S.IC
 TA31136FNG
 IC-E2820
 MAIN UNIT
 5 pieces

 8820001210
 Screw
 2438 screw
 IC-E2820
 Top cover
 10 pieces

Addresses are provided on the inside back cover for your convenience.

#### **REPAIR NOTES**

- Make sure a problem is internal before disassembling the transceiver.
- DO NOT open the transceiver until the transceiver is disconnected from its power source.
- 3. **DO NOT** force any of the variable components. Turn them slowly and smoothly.
- 4. **DO NOT** short any circuits or electronic parts. An insulated tuning tool **MUST** be used for all adjustments.
- DO NOT keep power ON for a long time when the transceiver is defective.
- DO NOT transmit power into a signal generator or a sweep generator.
- ALWAYS connect a 50 dB to 60 dB attenuator between the transceiver and a Modulation Analyzer or spectrum analyzer when using such test equipment.
- 8. **READ** the instructions of test equipment thoroughly before connecting equipment to the transceiver.

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### **SECTION 1**

### **SPECIFICATIONS**

#### GENERAL

• Frequency coverage : (unit: MHz)

Version	Left Band	Right Band
Europe1	Rx: 118–549.995* <sup>1, *2</sup> Tx: 144–146, 430–440	Rx: 118–173.995*1, 375–549.995*2, 810–999.99*3 Tx: 144–146, 430–440
Europe2	Tx/Rx: 144-1	46, 430–440

\*1Guaranteed: 144-146 MHz range only.; \*2Guaranteed: 430-440 MHz; \*3 Not guaranteed

• Type of emission : FM, AM (Receive only),

DV (optional UT-123 is required)

Number of memory channels
522 (incl. 20 scan edges and 2 calls)
Frequency resolution
5, 6.25, 10, 12.5, 15, 20, 25, 30, 50 kHz

Operating temperature range
 Frequency stability
 Power supply requirement
 : ±2.5 ppm (-10°C to +60°C)
 : ±2.5 ppm (-10°C to +60°C)
 : 13.8 V DC ±15%

• Current drain (at 13.8 V DC: approx.):

Transmit at 50 W 13 A
Receive standby 1.2 A
(simultaneous receive) max. audio 1.8 A

Antenna connector : SO-239 (50 Ω)×2 (Tx/Rx and Diversity)

Dimensions (proj. not included)

 $\begin{tabular}{lll} \mbox{Main Unit} & 150(W) \times 40(H) \times 187.7(D) \mbox{ mm} \\ \mbox{Remote controller} & 150(W) \times 58(H) \times 31.5(D) \mbox{ mm} \\ \end{tabular}$ 

Weight (approx.)

Main unit 1.5 kg

Remote controller 210 g (incl. separation cable)

#### **TRANSMITTER**

• Modulation system : Variable reactance frequency modulation

Output power
 Max. frequency deviation
 ±5.0 kHz (wide)
 ±2.5 kHz (narrow)
 Spurious emissions
 Less than -60 dB
 Microphone connector
 8-pin modular (600 Ω)

#### RECEIVER

Narrow

• Receive system : Double-conversion superheterodyne

• Intermediate frequencies :

Left band 1st: 38.85 MHz, 2nd: 450 kHz Right band 1st: 46.35 MHz, 2nd: 450 kHz

• Sensitivity (amateur bands only):

FM (12 dB SINAD) Less than 0.18  $\mu$ V DV (BER 1%) Less than 0.35  $\mu$ V

(optional UT-123 is required)

• Squelch sensitivity $^{\dagger}$  (threshold) : Less than 0.13  $\mu V$ 

Selectivity<sup>†</sup> (typical)

Wide More than 10 kHz/6 dB

Less than 30 kHz/60 dB More than 6 kHz/6 dB Less than 20 kHz/60 dB

DV (optional UT-123 is required) More than 50 dB
• Spurious and image rejection† : More than 60 dB

\*More than 55 dB for UHF on left band.

• AF output power† (at 13.8 V DC) : More than 2.4 W at 10% distortion with an

8 Ω load

• Ext. speaker connectors : 3-conductor 3.5 (d) mm/8  $\Omega$ 

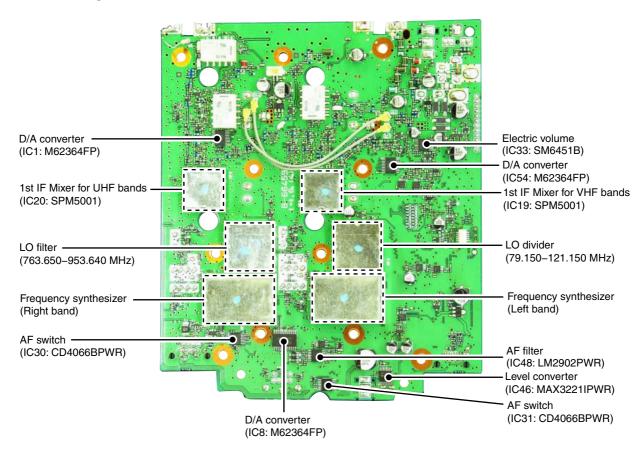
†Guaranteed 144-146 MHz and 430-440 MHz ranges only.

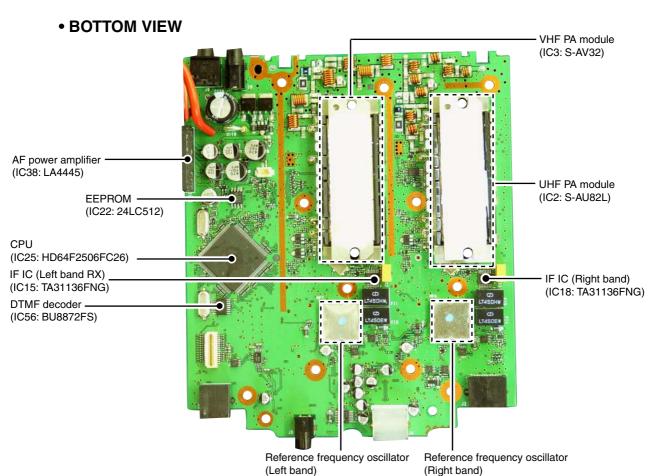
All stated specifications are subject to change without notice or obligation.

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## **INSIDE VIEWS**

#### TOP VIEW

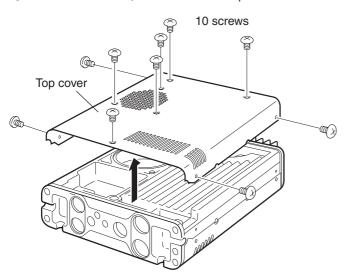




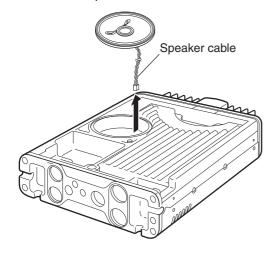
## SECTION 3 DISASSEMBLY INSTRUCTION

#### 1. Removing the top cover

① Unscrew 10 screws, then remove the top cover.

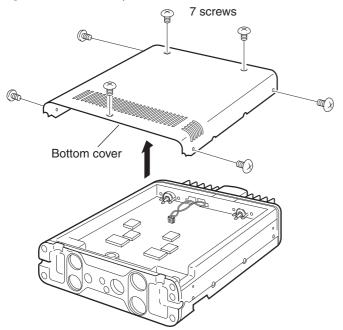


② Disconnect the speaker cable.



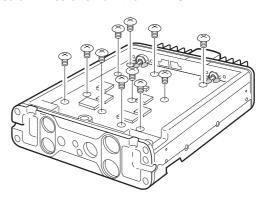
#### 2. Removing the bottom cover

 $\ensuremath{\textcircled{1}}$  Unscrew 7 screws, then remove the bottom cover.

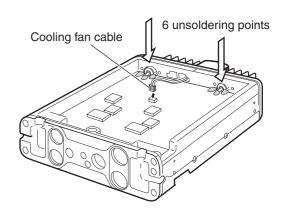


#### 3. Removing the MAIN UNIT

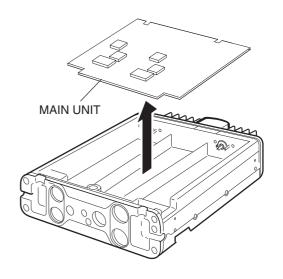
1) Unscrew 11 screws from the MAIN UNIT.



② Disconnect the cooling fan cable, and unsolder 6 points at the antenna connectors (grey colored).



3 Remove the MAIN UNIT in the direction of the arrow.



### **SECTION 4**

### **CIRCUIT DESCRIPTION**

## 4-1 RECEIVER CIRCUITS RF CIRCUITS

#### <Left band>

#### • 118-174 MHz

The received signals from the antenna connector ANT-1 (J1) are passed through two LPFs (L101, 104, 108, C342, 346; L88, 92, 96, C318, 326, 330), then applied to the RF amplifier (Q37) via TX/RX switch (D75). The amplified signals are passed through the RX switch (RL2), attenuator (D68) and tuned BPF (D55, 66), before being applied to another RF amplifier (Q33). The amplified signals are applied to the 1st mixer (IC19) via the another tuned BPF (D41, 44) and RX switch (D38).

While the diversity operation is activated, the received signals are also input from ANT-2 (J2). The received signals are passed through two LPFs (L103, 106, 109, C344, 348; L90, 93, 98, C319, 327, 348), antenna switch (D65, 72) and limitter (D64, 67), then applied to the RF amplifier (Q39).

The amplified signals are applied to the RX switch (RL2), and gone through the same process as the received signals from ANT-1 (J1).

#### • 174-260 MHz

The received signals from the antenna connector (J1) are passed through two RX switches (RL3 and D56) and the tuned BPF (D51), then applied to the RF amplifier (Q34). The amplified signals are passed through the BPF (D45), attenuator (R139, 144, 147) and RX switch (D36) before being applied to the 1st mixer (IC19).

#### • 260–375 MHz

The received signals from the antenna connector (J1) are passed through two RX switches (RL3 and D57) and the tuned BPF (D50), then applied to the RF amplifier (Q35).

The amplified signals are passed through the BPF (D465), attenuator (R142, 143, 150) and RX switch (D37) before being applied to the 1st mixer (IC19).

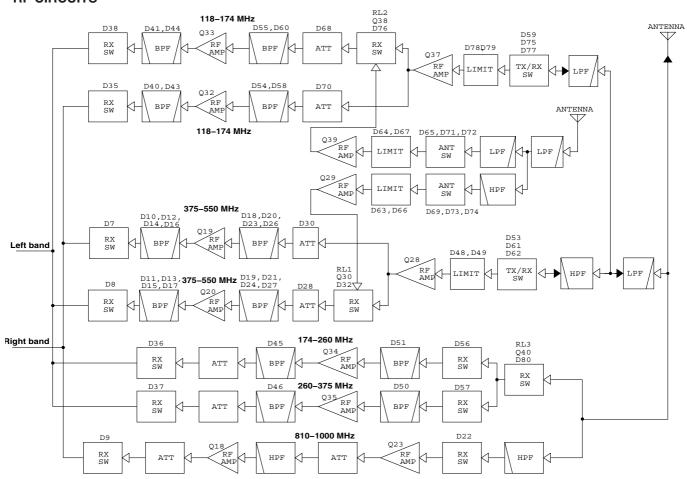
#### • 375-550 MHz

The received signals from the antenna connector (J1) are passed through the LPF (L101, 104, 108, C342, 346) and HPF (L77, 80, C296, 297, 303, 308), then applied to the RF amplifier (Q28) via TX/RX switch (D53, 61, 62). The amplified signals are passed through the RX switch (RL1), attenuator (D28) and tuned BPF (D19, 21, 24, 27), before being applied to another RF amplifier (Q20). The amplified signals are applied to the 1st mixer (IC19) via the another tuned BPF (D11, 13, 15, 17) and RX switch (D8).

While the diversity operation is activated, the received signals are also input from antenna connector ANT-2 (J2). The received signals are passed through the LPF (L103, 106, 109, C344, 348), HPF (L95, 99, C329, 333, 338), antenna switch (D69, 73, 74) and limitter (D63, 66), then applied to the RF amplifier (Q29).

The amplified signals are applied to the RX switch (RL1), and gone through the same process as the received signals from ANT-1 (J1).

#### • RF CIRCUITS



#### **1ST IF CIRCUITS**

RX signals from the RF circuits are converted into the 38.85 MHz 1st IF signal by being mixed with LO signals from the left band VCO (Q111, D145–147).

The converted IF signal from the 1st mixer is passed through the IF filter (FI5) to be filtered. The filtered IF signal is applied to the 1st IF amplifier (Q66) via the limiter (D88). The amplified 1st IF signal is applied to the IF IC (IC15, pin 16)

#### 2ND IF AND DEMODULATOR CIRCUITS (Fig. 2)

IC15 is an IF IC which contains 2nd mixer, limiter amplifier, noise amplifier, quadrature detector and RSSI circuit, etc. in its package.

The 1st IF signal from the 1st IF amplifier (Q66) is converted into the 450 kHz 2nd IF signal by being mixed with tripled reference frequency signal (38.4 MHz) from the PLL IC (IC41) via the tripler (Q105). The converted 2nd IF signal is output from pin 3, and passed through the ceramic filter (FI1 for narrow mode, FI2 for wide mode) to remove sideband noise, then applied to the IF IC from pin 5 again.

#### • FM DEMODULATOR

The filtered 2nd IF signal from pin 5 is amplified at the limiter amplifier, and FM-demodulated at the quadrature detector circuit. The demodulated AF signals are output from pin 9 and routed to the AF circuits via two AF switches (IC11 and IC13).

#### • AM DEMODULATOR CIRCUITS

In the AM mode, the 2nd IF signal from the FI2 is applied to the AM-demodulator circuit (Q55, Q57). The demodulated AF signals are routed to the AF circuits via two AF switches (IC11 and IC13).

#### SQUELCH CIRCUITS

#### NOISE SQUELCH

A portion of FM-demodulated AF signals from the IF IC (IC15, pin 9) are level-adjusted by D/A converter (IC8), and passed through the noise filter (IC15 and some R and C) to be filtered noise components (30 kHz and above signals) in the AF signals. The filtered noise components aree detected in the IC15 and output from pin 13, then applied to the CPU (IC25, pin 100) as "L\_SQL" signal.

Then the CPU outputs "L\_AF\_MUTE" signal from pin 82 to the speaker mute switch (Q102), according to the "L\_SQL" signal level. Thus the AF line is connected to the GND to turn the AF output OFF.

#### • CTCSS/DTCS

CTCSS/DTCS signals in the demodulated AF signals from the AF switch (IC13) are passed through the tone filter (Q41). The filtered CTCSS/DTCS signals are applied to the CPU IC25, pin 70) as "L\_DTCSIN" signal. The CPU (IC25) compares the applied signal and the set CTCSS/DTCS, then outputs control signal as same as "NOISE SQUELCH."

#### • DTMF

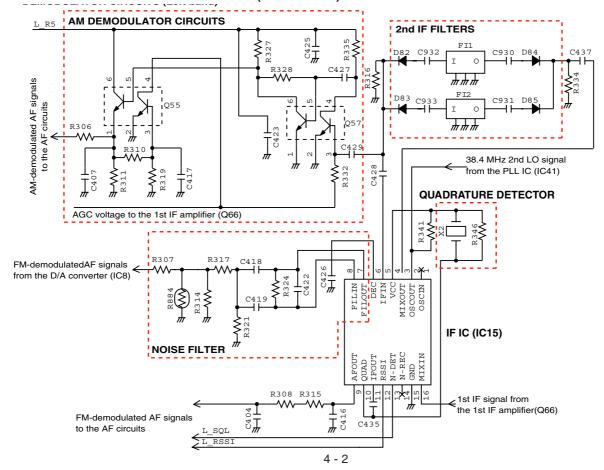
DTMF signals in the demodulated AF signals from the AF switch (IC13) are passed through two AF switches (IC57 and IC58), then applied to the DTMF decoder (IC56) to be decoded.

#### **AF CIRCUITS**

The AM/FM-demodulated AF signals from the AF switch (IC11) are passed through the AF filter (Q47). The filtered AF signals are applied to the electric volume (IC33) to be adjusted its level. The level-adjusted AF signals are applied to the dual AF power amplifiier (IC38) to obtain AF output power level, then applied to the internal (CHASSIS; SP1) or an external speaker via external speaker jack (J7).

If an external speaker is connected to the J8, the leveladjusted AF signals from the electric volume (IC33) are applied to the connected speaker.

#### 2ND IF AND DEMODULATOR CIRCUITS (LEFT BAND)



#### **RF CIRCUITS**

#### <Right band>

#### • 118-174 MHz

The received signals from the antenna connector ANT-1 (J1) are passed through two LPFs (L101, 104, 108, C342, 346; L88, 92, 96, C318, 326, 330), then applied to the RF amplifier (Q37) via TX/RX switch (D59). The amplified signals are passed through the attenuator (D70) and tuned BPF (D54, 58), before being applied to another RF amplifier (Q32). The amplified signals are applied to the 1st mixer (IC20) via the another tuned BPF (D40, 43) and RX switch (D35).

#### • 375-550 MHz

The received signals from the antenna connector (J1) are passed through the LPF (L101, 104, 108, C342, 346) and HPF (L77, 80, C296, 297, 303, 308), then applied to the RF amplifier (Q28) via TX/RX switch (D53, 61, 62). The amplified signals are passed through the attenuator (D30) and tuned BPF (D18, 20, 23, 26), before being applied to another RF amplifier (Q19). The amplified signals are applied to the 1st mixer (IC20) via the another tuned BPF (D10, 12, 14, 16) and RX switch (D7).

#### • 810-1000 MHz

The received signals from the ANT-1 (J1) are passed through the HPF (L102, 105, 107, 110, C337, 339, 340, 343, 347, 349) and RX switch (D22), then applied to the RF amplifier (Q23). The amplified signals are passed through the attenuator (R39, 40, 51), and applied to the another RF amplifier (Q18) to be amplified again. The amplified signals are then passed through another attenuator (R14) and RX switch (D9) before being applied to the 1st mixer (IC20).

#### **1ST IF CIRCUITS**

RX signals from the RF circuits are converted into the 46.35 MHz 1st IF signal by being mixed with LO signals from the right band VCO (Q72, D89, 90; Q73, D87, 91, 92).

The converted IF signal from the 1st mixer (IC20) is passed through the IF filter (IF6) to be filtered. The filtered IF signal is applied to the 1st IF amplifier (Q75) via the limiter (D100). The amplified 1st IF signal is applied to the IF IC (IC18, pin 16)

#### 2ND IF AND DEMODULATOR CIRCUITS

IC15 is an IF IC which contains 2nd mixer, limiter amplifier, noise amplifier, quadrature detector and RSSI circuit, etc. in its package.

The 1st IF signal from the 1st IF amplifier (Q75) is converted into the 450 kHz 2nd IF signal by being mixed with tripled reference frequency signal (45.9 MHz) from the PLL IC (IC14) via the tripler (Q52). The converted 2nd IF signal is output from pin 3, and passed through the ceramic filter (FI3 for narrow mode, FI4 for wide mode) to remove sideband noise, then applied to the IF IC from pin 5 again.

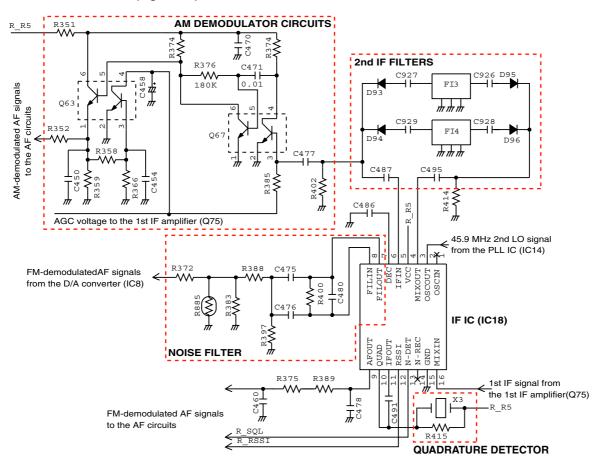
#### • FM DEMODULATOR

The filtered 2nd IF signal from pin 5 is amplified at the limiter amplifier, and FM-demodulated at the quadrature detector circuit (X3). The demodulated AF signals are output from pin 9 and routed to the AF circuits via two AF switches (IC12 and IC16).

#### • AM DEMODULATOR CIRCUITS

In the AM mode, the 2nd IF signal from the FI3 is applied to the AM-demodulator circuit (Q63, Q67). The demodulated AF signals are routed to the AF circuits via two AF switches (IC12 and IC16).

#### • DEMODULATOR CIRCUITS (Right band)



#### **SQUELCH CIRCUITS**

#### NOISE SQUELCH

A portion of FM-demodulated AF signals from the IF IC (IC18, pin 9) are level-adjusted by D/A converter (IC8), and passed through the noise filtier (IC18 and some R and C) to be filtered noise components (30 kHz and above signals) in the AF signals. The filtered noise components are detected in the IC18 and output from pin 13, then applied to the CPU as "R\_SQL" signal.

Then the CPU outputs "R\_AF\_MUTE" signal from pin 51 to the speaker mute switch (Q102), according to the "R\_SQL" signal level. Thus the AF line is connected to the GND to turn the AF output OFF.

#### • CTCSS/DTCS

CTCSS/DTCS signals in the demodulated AF signals from the AF switch (IC16) are passed through the tone filter (Q42) . The filtered CTCSS/DTCS signals are applied to the CPU IC12) as "R\_DTCS" signal.

The CPU (IC25) compares the applied signal and the set CTCSS/DTCS, then outputs control signal as same as "NOISE SQUELCH."

#### • DTMF

DTMF signals in the demodulated AF signals from the AF switch (IC16) are passed through two AF switches (IC57 and IC58), then applied to the DTMF decoder (IC56) to be decoded.

#### **AF CIRCUITS**

The AM/FM-demodulated AF signals from the AF switch (IC12) are passed through the AF filter (Q48). The filtered AF signals are applied to the electric volume (IC33) to be adjusted its level. The level-adjusted AF signals are applied to the dual AF power amplifiier (IC38) to obtain AF output power level, then applied to the an external speaker via external speaker jack (J8).

## 4-2 TRANSMITTER CIRCUITS MICROPHONE AMPLIFIER CIRCUITS

The audio signals from the microphone (MIC signals) are applied to the microphone amplifier (IC28) via J2 and HPF (Q87). The amplified MIC signals are passed through the microphone gain switch (Q88) and MIC mute switch (IC30), then passed through or by-passed ALC amplifier (IC32) via AF switches (IC29 and IC52).

The MIC signals from the AF switch (IC52) are passed though the HPF (IC48), LPF (IC48) and AF switch (IC51), and then applied to the AF amplifier (IC48). The amplified MIC signals are applied to the D/A converter (IC8) for level (deviation) adjustment. The level adjusted MIC signals are applied to the VCO as the modulation signals via modulation signal selector.

#### < OPERATION ON THE LEFT BAND>

The modulation signals are applied to the variable capacitor D147 of the left band VCO (Q111, D145–147) via the modulation selector (IC9) and modulation mute switch (Q109), and modulated. The modulated VCO output are amplified by the buffer (Q113) and LO amplifier (IC44), and applied to the transmit amplifiers as the TX signal, via the LO switches (D155, 157), LPF(L157, C818, 820) and attenuator (R33, 37, 46).

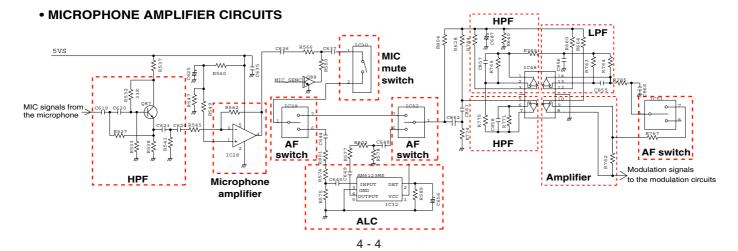
#### TRANSMIT POWER AMPLIFIERS

TX signal from the attenuator (R33, 37, 46) is amplified by pre-drive (Q25) and drive (Q27) amplifiers to obtain RF level for power module (IC3). The amplified TX signal is applied to the power amplifier which is a VHF band PA module composed by two power MOS-FETs. The power-amplified TX signal is passed through the LPF, power detector, antenna switch (D59) and LPF, before being applied to the antenna connector (CHASSIS; J1).

#### **APC CIRCUITS**

A portion of the TX signal from IC3 is rectified at the power detector (D39, D47), and converted into the DC voltage which is in proportion to the RF power, and applied to the operational amplifier (IC4, pin 6). IC4 is an APC amplifier for both of V/UHF bands. The TX power setting voltage "PCON\_V" from the D/A converter (IC1, pin 7) is applied to the pin 5 as a reference. IC4 is rolled as a differential amplifier which outputs voltage in inverse proportion to rectified one. When the TX power increased, the rectified voltage also increased, that causes the decrease of output voltage of differential amplifier. The decrease of output voltage of differential amplifier causes the drop of the gate voltage of IC3, Thus the TX power maintained to keep stable level.

TX muting is carried out by TX mute SW (Q36) controlled by "TX\_mute" signal. Applying "TX\_mute" signal to the base terminal of Q36 to turn it ON, 8 V DC appears on the pin 6 of IC4 and its output voltage downs to 0 V DC to inactivate IC3.



#### < OPERATION ON THE RIGHT BAND>

The modulation signals are applied to the variable capacitor D87 of the left band VCO (Q73, D87, 91, 92) via the modulation selector (IC63) and modulation mute switch (Q64), and modulated. The modulated VCO output are amplified by the buffer (Q76) and LO amplifier (IC45), and applied to the transmit amplifiers as the TX signal, via the VCO switch (D102). The amplified LO signals are applied to the transmit amplifiers via the LO switch (D103), two HPFs (L124, C527, 532; L159, C533, 535) and attenuator (R43, 47, 57).

#### TRANSMIT POWER AMPLIFIERS

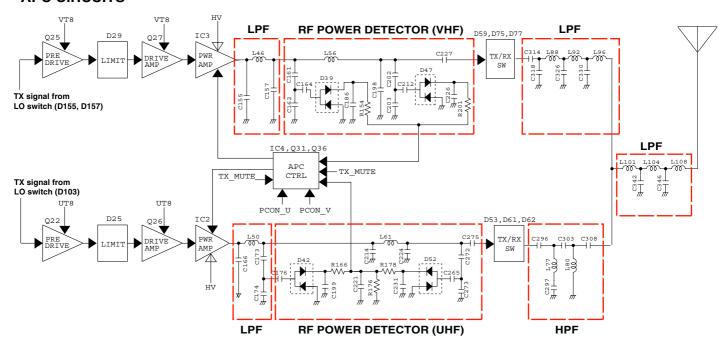
TX signal from the attenuator (R43, 47, 57) is amplified by pre-drive (Q22) and drive (Q26) amplifiers to obtain RF level for power module (IC2). The amplified TX signal is applied to the power amplifier which is a UHF band PA module composed by two power MOS-FETs. The power-amplified TX signal is passed through the LPF, power detector, antenna switch (D62) and LPF, before being applied to the antenna connector (CHASSIS; J1).

#### **APC CIRCUITS**

A portion of the TX signal from IC2 is rectified at the power detector (D42, 52), and converted into the DC voltage which is in proportion to the RF power, and applied to the operational amplifier (IC4, pin 2). IC4 is an APC amplifier for both of V/UHF bands. The TX power setting voltage "PCON\_U" from the D/A converter (IC1, pin 6) is applied to the pin 3 as a reference. IC4 is rolled as a differential amplifier which outputs voltage in inverse proportion to rectified one. When the TX power increased, the rectified voltage also increased, that causes the decrease of output voltage of differential amplifier. The decrease of output voltage of differential amplifier causes the drop of the gate voltage of IC2, Thus the TX power maintained to keep stable level

TX muting is carried out by TX mute SW (Q36) controlled by "TX\_mute" signal. Applying "TX\_mute" signal to the base terminal of Q36 to turn it ON, 8 V DC appears on the pin 6 of IC4 and its output voltage downs to 0 V DC to inactivate IC3.

#### APC CIRCUITS



#### 4-3 FREQUENCY SYNTHESIZER **VCOs**

This transceiver has 3 VCOs; Left band VCO, Right band RX VCO and Right band TX/RX VCO.

#### LEFT BAND VCO (Q111, D145-147)

This VCO oscillates 1st LO signals for Left band RX and TX signal for VHF band.

#### <While receiving>

The VCO output signal is amplified by buffer (Q113) and LO amplifier (IC44), and applied to the LO filters according to the RX frequency.

#### • While Receiving 118-174 MHz signals

LO signals 135.575-255.575 MHz are applied to the divider (IC43) via LO switch (D150) and attenuator (R706, 710, 711), and divided into 271.15-511.15 MHz signals. The divided LO signals are buffer-amplified by Q116, and applied to the left band 1st mixer (IC19) via the LPF (L115, 156, C809, 812, 816) and another LO switch (D156).

#### • While Receiving 174–260 MHz signals

LO signals 141.15-221.145 MHz are passed through the LPF (L148, 152, C785, 789, 795, 804) via LO switches (D151, 153), and applied to the left band 1st mixer (IC19).

• While Receiving 375–550 MHz signals LO signals 135.575–255.575 MHz are doubled to 271.15– 511.15 MHz signals, by being passed through the HPF (L149, C787, 790, 791), LPF (L151, C794, 796, 799) and HPF (L153, C800, 807) via LO switches (D152, 154). The doubled LO signals are applied to the left band 1st mixer (IC19).

#### <While transmitting>

The VCO output signal is amplified by buffer (Q113) and LO amplifier (IC44), and applied to the transmit amplifiers via the LO switches (D155, 157), LPF(L157, C818, 820) and attenuator (R33, 37, 46).

#### **RIGHT BAND RX VCO (Q72, D89, 90)**

This VCO oscillates 1st LO signals for right band RX (118-174 MHz and 810-1000 MHz).

The VCO output signal is amplified by buffer (Q74) and applied to the LO amplifier (IC45) via VCO switch (D160), and applied to the LO filters according to the RX frequency.

#### • While Receiving 118-174 MHz signals

LO signals 164.35-220.35 MHz are passed through the LPF (L123, 125, C529, 534, 539) via LO switches (D107, 159), and applied to the right band 1st mixer (IC20).

#### • While Receiving 810-1000 MHz signals

LO signals 381.825-476.82 MHz are applied to the LO amplifier (IC62) via LO switch (D101). The amplified LO signals are doubled to 763.65-953.64 MHz signals by being passed through the HPF (L130, 133, C554, 558, 560), LPF (L151, C794, 796, 799) and HPF (L135, C563, 568).

The doubled LO signals are applied to the right band 1st mixer (IC20).

#### RIGHT BAND TX/RX VCO (Q73, D87, 91, 92)

This VCO oscillates 1st LO signals for right band RX (375-550 MHz).

#### <While receiving>

LO signals 353.65-523.17 MHz are passed through the RF mute switch (Q79) and LPF (L131, 134, C562) via LO switches (D104, 108), and applied to the right band 1st mixer (IC20).

#### <While transmitting>

The VCO output signal is amplified by buffer (Q76), and applied to the LO amplifier (IC45) via the VCO switch (D102). The amplified LO signals are applied to the transmit amplifiers via the LO switch (D103), two HPFs (L124, C527, 532; L159, C533, 535) and attenuator (R43, 47, 57).

#### VCO CONFIGULATION BY FREQUENCY

VCO		LEFT BAND VCO RIGHT BAND RX VCO		RIGHT BAND TX/RX VCO	
Components		(Q111, D145–147) (Q72, D89, 90)		(Q73, D87, 91, 92)	
	(118–174 MHz)		135.575-255.575 MHz	164.35-220.35 MHz	-
Oscillating	RX	(174–260 MHz)	141.15-221.145 MHz	381.825-476.82 MHz	_
Frequency		(375–550 MHz)	135.575-255.575 MHz	-	353.65-523.17 MHz
		TX	136–174 MHz	ı	400–470 MHz

#### **PLL CIRCUITS**

The PLL circuit provides stable oscillation of the transmit frequency and receive 1st LO frequency. The PLL output frequency is controlled by the divided ratio (N-data) from the CPU.

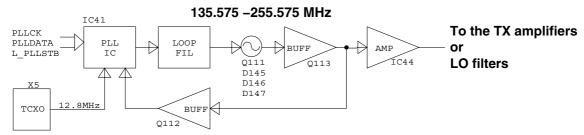
#### **LEFT BAND VCO LOOP**

A portion of VCO output signals from the buffer (Q113) are applied to the PLL IC (IC41) via another buffer (Q112). The applied signals are divided at the prescaler and programmable counter according to the control signals ("L\_PLLSTB," "PLLDATA" and "PLLCK") from the CPU. The divided signal is phase-compared with the 12. 8 MHz reference frequency signal from the reference frequency oscillator (X5), at the phase detector.

The phase difference is output from pin 5 as a pulse type signal after being passed through the internal charge pump. The output signal is converted into the DC voltage (lock voltage) by passing through the loop filter (R694, 696–698, C760–762). The lock voltage is applied to the variable capacitors (D145 and D146), and locked to keep the VCO frequency constant.

If the oscillated signal drifts, its phase changes from that of the reference frequency, causing a lock voltage change to compensate for the drift in the VCO oscillating frequency.

#### • LEFT BAND VCO LOOP



#### **RIGHT BAND RX VCO LOOP**

A portion of VCO output signals from the buffer (Q74) are applied to the PLL IC (IC14) via the VCO switch (D160) and another buffer (Q112). The applied signals are divided at the prescaler and programmable counter according to the control signals ("R\_PLLSTB," "PLLDATA" and "PLLCK") from the CPU. The divided signal is phase-compared with the 15.3 MHz reference frequency signal from the reference frequency oscillator (X1), at the phase detector.

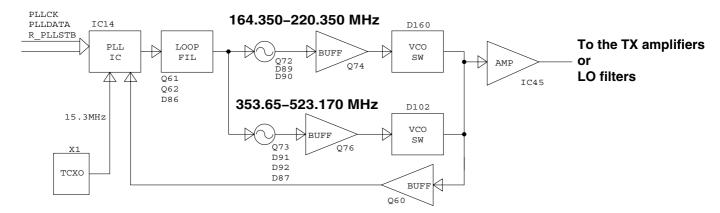
The phase difference is output from pin 5 as a pulse type signal after being passed through the internal charge pump. The output signal is converted into the DC voltage (lock voltage) by passing through the loop filter (Q61, 62, D86). The lock voltage is applied to the variable capacitors (D91, 92), and locked to keep the VCO frequency constant.

#### **RIGHT BAND TX/RX VCO**

A portion of VCO output signals from the buffer (Q76) are applied to the PLL IC (IC14) via the VCO switch (D102) and another buffer (Q60). The applied signals are divided at the prescaler and programmable counter according to the control signals ("R\_PLLSTB," "PLLDATA" and "PLLCK") from the CPU. The divided signal is phase-compared with the 15.3 MHz reference frequency signal from the reference frequency oscillator (X1), at the phase detector.

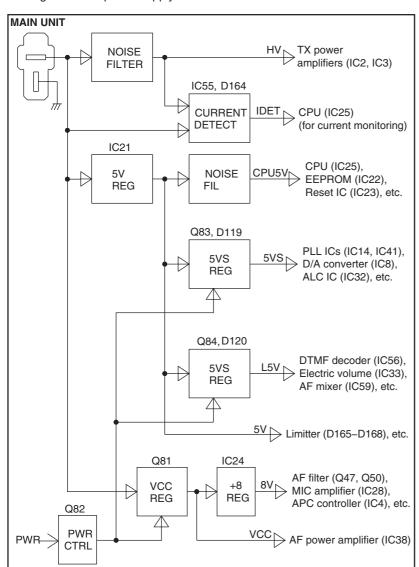
The phase difference is output from pin 5 as a pulse type signal after being passed through the internal charge pump. The output signal is converted into the DC voltage (lock voltage) by passing through the loop filter (Q61, 62, D86). The lock voltage is applied to the variable capacitors (D91, 92), and locked to keep the VCO frequency constant.

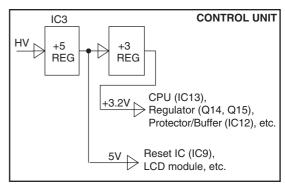
#### • RIGHT BAND RX AND TX/RX VCO LOOP



#### **4-4 POWER SUPPLY CIRCUITS**

Voltage from the power supply is routed to whole of the circuit in the transceiver via switches and regulators.





#### **4-5 CPU PORT ALLOCATION**

PIN	PORT NAME	PESCRIPTION DESCRIPTION	1/0
No.		Cut-off frequency shifting signal to the HPF	
3	AN	(IC48).  Cut-off frequency shifting signal to the HPF	0
4	DA_SEL	(IC48).	0
5	MM_MUTE	MIC mute signal to the MIC mute switch (IC30). "H"=MIC mute.	0
6	DCONT	ALC amplifier control signal tot the AF switches (IC29 and IC52). "H"=ALC amplifier ON.	0
7	R_WN_SEL	2nd IF filter (Right band; Wide/Narrow) toggling signal. "H"=Narrow."L"=Wide.	0
11	MIC_SENC	Microphone sensitivity select signal. "H"=High sensitivity.	0
17	MOD_DA	Modulation line switching signal to the MOD selector (Left band; IC9). "H"=Modulation enable.	0
18	MODSEL	Modulation line switching signal to the MOD selector (Right band; IC63). "H"=Modulation enable.	0
21	R_PLLSTB	Strobe signal to the PLL IC (Right band; IC14).	0
22	L_PLLSTB	Strobe signal to the PLL IC (Left band; IC41).	0
23	L_AMC	AM-demodulator circuit (Left band) control signal.  "H"=AM mode (AM-modulator circuit is activated).	0
24	DTCS_SEL	Tone filter switching signal to the LPF (Q100). "H"=DTCS mode. "L"=CTCSS mode.	0
25	L_R5C	RX circuits (Left band) control signal. "H"=RX circuits (Left band) is activated.	0
26	L_WN_SEL	2nd IF filter (Wide/Narrow) toggling signal.(Left band) "H"=Narrow. "L"=Wide."	0
27	UMMUTE	Modulation mute signal to the MOD mute switch (Right band; Q64). "H"=Modulation muted.	0
28	UTX_C	Transmitting control signal to the VT8 regulator (Q12, 15).	0
29	L_VCO_SHIFT	VCO oscillating frequency shift signal to the Left band VCO.	0
30	R_PLLSW	Lock-up time control signal to the loop filter (Right band). "H"=Fast lock-up time.	0
31	R_UNLOCK	PLL unlock signal from the PLL IC (Right band; IC14).	ı
32	PLLCK	Clock signal to the PLL ICs (Right band; IC14, Left band; IC41). (Commonly used for both of the Left and Right bands.)	0
33	PLLDATA	Data to the PLL ICs (Right band; IC14, Left band; IC41). (Commonly used for both of Left and Right bands.)	0
34	L_UNLOCK	PLL unlock signal from the PLL IC (Left band; IC41).	ı
35	VMMUTE	Modulation mute signal to the MOD mute switch (Left band; Q109). "H"=Modulation muted.	0
36	VTX_C	Transmitting control signal to the UT8 regulator (Q13, 17). "H"=While transmitting.	0
37	L_PLLSW	Lock-up time control signal to the loop filter (left band). "H"=Fast lock-up time.	0

PIN No.	PORT NAME	DESCRIPTION	
38	R_UVCO_SEL	VCO power control signal to the VCO select switch (Right band UHF; Q65, 68). "L"=Right band TX/RX VCO is activated.	0
39	R_VVCO_SEL	VCO power control signal to the VCO select switch (Right band VHF; Q65, 68). "L"=Right band RX VCO is activated.	0
40	L_LO_SW	LO filter switching signal to the LO regulator (Q106).	0
42	R_DA_SEL	AF line switching signal to the AF switch (IC12).	0
42	R_AFFIL_SEL	Switching signal to the AF filter (Right band; Q48).	0
43	R_DET_MUTE	AF line switching signal to the AF switch (IC16). "H"=AF mute.	0
44	L_DA_SEL	AF line switching signal to the AF switch (IC11).	0
45	L_DET_MUTE	AF line switching signal to the AF switch (IC13). "H"=AF mute.	0
48	D5VC	Power control signal for the optional unit.	0
51	R_AF_MUTE	AF mute signal to the SP mute switch (Right band; Q101). "H"=AF mute.	0
52	L_AFFIL_SEL	Switching signal to the AF filter (Left band; Q47).	0
53	DA3STB	Strobe signal to the D/A converter.	0
53	DA2_STB	Strobe signal to the electric volume.	0
55	DTCS	DTCS signal.	0
56	DTMF	DTMF signal.	0
57	MIC_SEL	Connected microphone detect signal.	Ι
61	DTMSTB	Strobe signal to the DTMF decoder (IC56).	-
62	MICUD	[UP]/[DWN] key input.	ı
63	R_RSLV	While receiving; inputs RSSI signal (IC18; Right band). While transmitting; inputs Lock Voltage from the PLL IC (IC14).	I
64	L_RSLV	While receiving; inputs RSSI signal from IF ICI (IC15; Left band). While transmitting; inputs Lock Voltage from the PLL IC (IC41).	ı
65	IDET	Current level from the current detector (IC55, Q164).	I
68	R_DTCS_IN	Demodulated DTCS signals from the CTCSS filter (Q42).	I
70	L_DTCS_IN	Demodulated DTCS signals from the CTCSS filter (Q41).	I
71	TEMP	Transceiver's internal temparature from the thermal detector circuit (R509).	I
76	SCL	I/O port for clock signal to the EEPROM (IC22).	I/O
77	AF_VOL_CK	Serial clock signal to the electric volume IC.	0
78	AF_VOL_DATA	Data signal to the electric volume IC.	0
79	AF_VOL_STB	Latch enable signal to the electric volume IC.	0
80	AF_VOL_RES	Reset signal to the electric volume IC.	0
80	PWR	Power control signal to the PWR controller (Q82). "H"=While the power is ON.	0
82	SDA	Data signal to the EEPROM (IC22).	I/O
83	L_AF_MUTE	AF mute signal to the SP mute switch (Q102).	0
85	MIC_PTT	Input port for [PTT] key on the connected microphone.	ı

PIN No.	PORT NAME	DESCRIPTION	1/0
100	RESET	Reset enable signal input.	ı
101	L_SQL	Noise signal from the IF IC (Left band; IC15).	ı
102	CL_SFT2	Clock frequency shifting signal.	0
105	R_SQL	Noise signal from the IF IC (Right band; IC18).	ı
122	R_DATA	Data lines for the control unit.	ı
123	TX_DATA	Data lines for the control unit.	0
127	TX232	Data bus for RS-232C communication.	0
128	RX232	Data bus for RS-232C communication.	ı
129	DA_CK	Serial clock signal to the D/A converter.	0
130	DA_DATA	Serial data to the D/A converter.	0
134	DA_STB	Strobe signal to the D/A converter.	0
135	R_R5C	RX circuits (Right band) control signal.	0
136	R400_S	Power line control signal to the 375–550 MHz band RF circuit (Right band).	0
137	R_RX800	Power line control signal to the 810–1000 MHz band RF circuit (Right band).	0
138	R_AMC	AM-demodulator circuit (Right band) control signal.	0
143	DTMSD	Data to the DTMF decoder (IC56).	-
144	DTMCK	Clock signal to the DTMF decoder (IC56).	-

## SECTION 5 ADJUSTMENT PROCEDURE

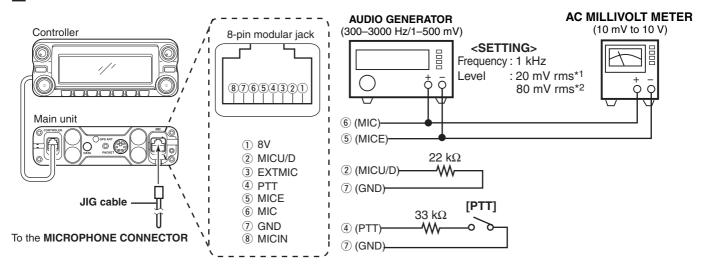
#### **5-1 PREPARATION**

#### ■ REQUIRED TEST EQUIPMENTS

When adjusting IC-E2820, following test equipments and JIG cable (modified 8-pin modular jack; see the illust below) are required.

EQUIPMENT	GRADE A	ND RANGE	EQUIPMENT	GRADE	AND RANGE
DC power supply	1	: 13.8 V DC : More than 20 A	Audio generator	Frequency range Output level	: 300–3000 Hz : 1–500 mV
RF power meter (terminated type)	Frequency range Impedance	: 1–100 W : 100–600 MHz : 50 Ω : Less than 1.2 : 1		Frequency range Output level	: 0.1–1 GHz : 0.1 μV to 32 mV (–127 to –17 dBm)
	1	: 0.1–600 MHz	AC millivoltmeter	Measuring range	: 10 mV to 10 V
Frequency counter	Frequency accuracy Sensitivity	: ±1 ppm or better : 100 mV or better	Terminator	Impedance Capacity	: 50 Ω : More than 100 W
Modulation Analyzer	1 1 1 1 1 3 1	: 30–600 MHz : DC to ±10 kHz	Attenuator	Power attenuation Capacity	1:40 dB : More than 100 W

#### JIG CABLE

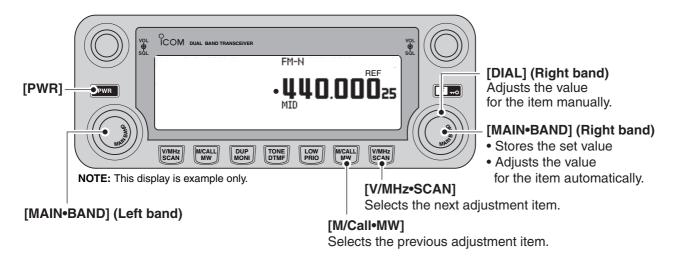


#### ENTERING ADJUSTMENT MODE

- ① Connect the JIG cable to the MICROPHONE CONNECTOR (see the illust above).
- 2 Push and hold the both of [MAIN•BAND] keys, then turn power ON.

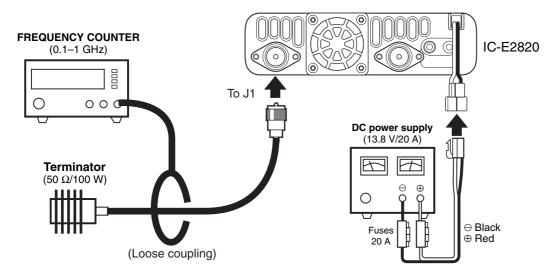
#### ■ KEY ASSIGNMENTS IN THE ADJUSTMENT MODE

Entering adjustment mode, the function display shows adjustment item and conditions as below.



#### **5-2 FREQUENCY ADJUSTMENT**

#### • CONNECTIONS FOR FREQENCY ADJUSTMENT

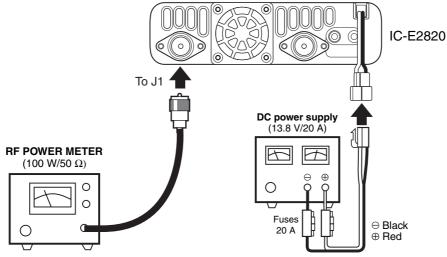


ADJUSTMENT		ADJUSTMENT CONDITIONS	OPERATION	VALUE
REFERENCE FREQUENCY (Left Band) [L REF]	1	<ul> <li>Connect a Terminator to the antenna connector (J1).</li> <li>Loosely couple a Frequency Counter to the antenna connector (J1).</li> <li>Transmitting</li> </ul>	adjust the reference frequency,	
(Right Band) [R REF]	2	Transmitting		435.000 MHz

#### **5-3 TRANSMIT ADJUSTMENTS**

#### **■ TRANSMIT OUTPUT POWER ADJUSTMENT**

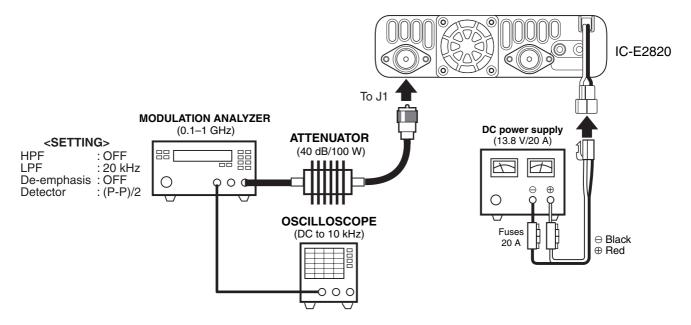
#### • CONNECTIONS FOR TX POWER ADJUSTMENT



ADJUSTMEN	IT ITEM		ADJUSTMENT CONDITIONS	OPERATION	VALUE
144 MHz BAND TRANSMIT OUTPUT POWER	(Band Low) [L PHL]	1	Connect an RF Power Meter to the antenna connector (J1).     Transmitting	adjust the transmit output power, then push the right band's [MAIN	50 W
(HI POWER)	(Band High) [L PHH]	2		•BAND] key during transmit.	
(MID POWER)	(Band Low) [L PML]	3			15 W
	(Band High) [L PMH]	4			
(LOW POWER)	(Band Low) [L PLL]	5			5 W
	(Band High) [L PLH]	6			
430 MHz BAND TRANSMIT OUTPUT POWER	(Band Low) [R PHL]	1	Connect an RF Power Meter to the antenna connector (J1).     Transmitting	adjust the transmit output power, then push the right band's [MAIN]	50 W
(HI POWER)	(Band High) [R PHH]	2		•BAND] key during transmit.	
(MID POWER)	(Band Low) [R PML]	3			15 W
	(Band High) [R PMH]	4			
(LOW POWER)	(Band Low) [R PLL]	5			5 W
	(Band High) [R PHH]	6			

#### **DEVIATION ADJUSTMENT**

#### • CONNECTION FOR MODULATION ADJUSTMENTS



ADJU	STMENT	ГІТЕМ		ADJUSTMENT CONDITIONS	OPERATION	VALUE
144 MHz BAND	(Band Low)	(FM) [L FMD]	1	the antenna connector (J1) through	Rotate the right band's <b>[DIAL]</b> to adjust the deviation, then push	±4.2 kHz
(Left Band)		(FM-N) [L FMD]	2		the right band's [MAIN•BAND] key during transmit.	±2.1 kHz
I '	(Band Center)	(FM) [L FMD]	3	connector and setting details).  • Transmitting		±4.2 kHz
		(FM-N) [L FMD]	4			±2.1 kHz
	(Band High)	(FM) [L FMD]	5			±4.2 kHz
		(FM-N) [L FMD]	6			±2.1 kHz
144 MHz BAND MODULATION BALANCE (Left Band)	(Band Low)	(FM) [L FMB]	1	the antenna connector (J1) through	Rotate the right band's [DIAL] to adjust the wave form, then push the right band's [MAIN•BAND] key during transmit.	(Square Wave form)
		(FM-N) [L FMB]	2			Flat
(Left Baria)	(Band Center)	(FM) [L FMB]	3	Analyzer.  No audio signals are applied to the JIG cable (See the page 5-1).  Transmitting		
		(FM-N) [L FMB]	4			
	(Band High)	(FM) [L FMB]	5			
		(FM-N) [L FMB]	6			
144 MHz BAND DTCS MODULA		(FM) [L MDT]	1	the antenna connector (J1) through	Rotate the right band's <b>[DIAL]</b> to adjust the deviation, then push	±0.8 kHz
(Left Band)		(FM-N) [L MDT]	2		the right band's [MAIN•BAND] key.	
144 MHz CTCSS MODULATION		(FM) [L MCT]	1	the antenna connector (J1) through	adjust the deviation, then push	±0.75 kHz
(Left Band)		(FM-N) [L MCT]	2		the right band's [MAIN•BAND] key .	

**■** DEVIATION ADJUSTMENT (continued)

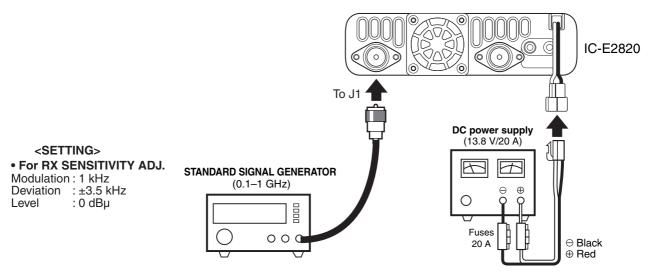
ADJU	STMEN	ГІТЕМ		ADJUSTMENT CONDITIONS	OPERATION	VALUE
430 MHz DEVIATION	(Band Low)	(FM) [R FMD]	1	the antenna connector (J1) through	Rotate the right band's [DIAL] to adjust the deviation, then push	±4.2 kHz
(Right Band)		(FM-N) [R FMD]	2		the right band's [MAIN•BAND] key during transmit.	±2.1 kHz
	(Band Center)	(FM) [R FMD]	3	connector and setting details).  Transmitting		±4.2 kHz
		(FM-N) [R FMD]	4			±2.1 kHz
	(Band High)	(FM) [R FMD]	5			±4.2 kHz
		(FM-N) [R FMD]	6			±2.1 kHz
430 MHz MODULATION	(Band Low)	(FM) [R FMB]	1	the antenna connector (J1) through	Rotate the right band's <b>[DIAL]</b> to adjust the wave form, then push	(Square Wave form)
BALANCE (Right Band)		(FM-N) [R FMB]	2		the right band's [MAIN•BAND] key during transmit.	Flat
	(Band Center)	(FM) [R FMB]	3	Transmitting		
		(FM-N) [R FMB]	4			
	(Band High)	(FM) [R FMB]	5			
		(FM-N) [R FMB]	6			
DTCS MODULATION (Pight Road)		(FM) [R MDT]	1	the antenna connector (J1) through	Rotate the right band's [DIAL] to adjust the deviation, then push	±0.8 kHz
		(FM-N) [R MDT]	2	an attenuator.  No audio signals are applied to the JIG cable (See the page 5-1).  Transmitting		
430 MHz CTCSS		(FM) [R MCT]	1	the antenna connector (J1) through	Rotate the right band's [DIAL] to adjust the deviation, then push	±0.75 kHz
MODULATION (Right Band)		(FM-N) [R MCT]	2		the right band's [MAIN•BAND] key.	
DV MODE DEVIATION*		(Band Low) [L MDS]	1	Connect a Modulation Analyzer to the antenna connector (J1) through adjust the deviation, then push		±0.9 kHz
(144 MHz Band	)	(Band Center) [L MDS]	2		the right band's [MAIN•BAND] key during transmit.	
		(Band High) [L MDS]	3			
DV MODE MODULATION		(Band Low) [L MDB]	1	the antenna connector (J1) through	Rotate the right band's [DIAL] to adjust the wave form, then push	Minimum deviation
BALANCE* (144 MHz Band	)	(Band Center) [L MDB]	2	T '01'	the right band's [MAIN•BAND] key during transmit.	
		(Band High) [L MDB]	3			
DV MODE DEVIATION* (430 MHz Band)		(Band Low) [R MDS]	1	the antenna connector (J1) through	Rotate the right band's [DIAL] to adjust the wave form, then push	±1 kHz
		(Band Center) [R MDS]	2	an attenuator.  • Transmitting  the right band's [MAIN•BAND] key during transmit.		
		(Band High) [R MDS]	3			
DV MODE MODULATION BALANCE*		(Band Low) [R MDB]	1	the antenna connector (J1) through	Rotate the right band's [DIAL] to adjust the wave form, then push the right band's [MAINERAND]	Minimum deviation
BALANCE* (430 MHz Band)		(Band Center) [R MDB]	2	<del>-</del>	the right band's [MAIN•BAND] key during transmit.	
	is require	(Band High) [R MDB]	3			

<sup>\*;</sup> Optional UT-123 is required.

#### **5-4 RECEIVE ADJUSTMENTS**

#### **SENSITIVITY ADJUSTMENT**

#### • CONNECTION FOR RECEIVE SENSITIVITY AND RSSI ADJUSTMENTS



Į.	ADJUSTMENT I	TEM		ADJUSTMENT CONDITIONS	OPERATION	VALUE
SENSITIVITY	Connect a Sta	ndard Signal G	ienei	rator to the antenna connector (J1).		
	118.020 MHz	(Left Band) [L LT1]	1	• Set the SSG as; Frequency : 118.020 MHz		
		(Right Band) [R LT1]	2			
	127.020 MHz	(Left Band) [L MT1]	3	• Set the SSG as; Frequency : 127.020 MHz		
		(Right Band) [R MT1]	4			
	135.980 MHz	(Left Band) [L HT1]	5	• Set the SSG as; Frequency : 135.980 MHz		
		(Right Band) [R HT1]	6			
	136.020 MHz	(Left Band) [L LT2]	7	• Set the SSG as; Frequency : 136.020 MHz		
		(Right Band) [R LH2]	8			
	146.020 MHz	(Left Band) [L MT2]	9	• Set the SSG as; Frequency : 146.020 MHz	Push the right band's	(Automati
		(Right Band) [R MT2]	10		[MAIN•BAND] key.	adjustment)
	173.980 MHz	(Left Band) [L HT2]	11	• Set the SSG as; Frequency : 173.980 MHz		
		(Right Band) [R HT2]	12			
	174.020 MHz	(Left Band) [L LT3]	13	• Set the SSG as; Frequency : 174.020 MHz		
	220.020 MHz	(Left Band) [L MT3]	14	• Set the SSG as; Frequency : 220.020 MHz		
	250.020 MHz	(Left Band) [L HT3]	15	• Set the SSG as; Frequency : 250.020 MHz		
	260.020 MHz	(Left Band) [L LT4]	16	• Set the SSG as; Frequency : 260.020 MHz		
	310.020 MHz	(Left Band) [L MT4]	17	• Set the SSG as; Frequency : 310.020 MHz		
	360.020 MHz	(Left Band) [L HT4]	18	• Set the SSG as; Frequency : 360.020 MHz		

## ■ SENSITIVITY ADJUSTMENT (continued)

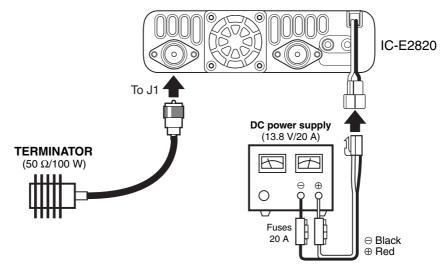
<u> </u>	ADJUSTMENT I	TEM		ADJUSTMENT CONDITIONS	OPERATION	VALUE
SENSITIVITY	375.020 MHz	(Left Band) [L LT5] (Right Band) [R LT5]	19 20	Set the SSG as;     Frequency : 375.020 MHz		
	399.980 MHz	(Left Band) [L HT5]	21	• Set the SSG as; Frequency : 399.980 MHz		
		(Right Band) [R HT5]	22			
	400.020 MHz	(Left Band) [L LT6]	23	• Set the SSG as; Frequency : 400.020 MHz		
		(Right Band) [R LT6]	24			
	440.020 MHz	(Left Band) [L MT6]	25	• Set the SSG as; Frequency : 440.020 MHz		
		(Right Band) [R MT6]	26		Push the right band's	(Automatic
	449.980 MHz	(Left Band) [L HT6]	27	• Set the SSG as; Frequency : 449.980 MHz	[MAIN•BAND] key.	adjustment)
		(Right Band) [R HT6]	28			
	450.020 MHz	(Left Band) [L LT7]	29	• Set the SSG as; Frequency : 450.020 MHz		
		(Right Band) [R LT7]	30			
	500.020 MHz	(Left Band) [L MT7]	31	• Set the SSG as; Frequency : 500.020 MHz		
		(Right Band) [R MT7]	32			
	549.980 MHz	(Left Band) [L HT7]	33	• Set the SSG as; Frequency : 549.980 MHz		
		(Right Band) [R HT7]	34			

#### S-METER ADJUSTMENT

	ADJUSTMENT I	TEM		ADJUSTMENT CONDITIONS OPERATION VALUE
S-METER	Connect a Star	ndard Signal G	iener	erator to the antenna connector (J1).
	127.020 MHz (S3 level)	(Left Band) [L S31] (Right Band) [R S31]	1 2	• Set the SSG as; Frequency : 127.020 MHz Level : –1 dBµ
	(Full scale)	(Left Band) [L SF1] (Right Band) [R SF1]	3	• Set the SSG as; Level : +15 dBµ
	146.020 MHz (S3 level)	(Left Band) [L S32] (Right Band) [R S32]	5	• Set the SSG as; Frequency : 146.020 MHz Level : –1 dBµ
	(Full scale)	(Left Band) [L SF2] (Right Band)	7	• Set the SSG as; Level : +15 dBμ
	220.020 MHz (S3 level)	[R SF2] (Left Band) [L S33]	9	• Set the SSG as; Frequency : 220.020 MHz Level : –1 dBµ
	(Full scale)	(Left Band) [L SF3]	10	Set the SSG as;     Level : +15 dBµ
	300.020 MHz (S3 level)	(Left Band) [L S34]	11	• Set the SSG as; Frequency : 300.020 MHz Level : –1 dBµ
	(Full scale)	(Left Band) [L SF4]	12	• Set the SSG as; Level : +15 dBµ
	387.020 MHz (S3 level)	(Left Band) [L S35]	13	Frequency: 387.020 MHz Push the right band's (Automatic [MAIN•BAND] key.
		(Right Band) [R S35]	14	· ·
	(Full scale)	(Left Band) [L SF5] (Right Band)	15	Level : +15 dBµ
	435.020 MHz (S3 level)	[R SF5] (Left Band) [L S36]	17	Frequency : 435.020 MHz
	·	(Right Band) [R S36]	18	· ·
	(Full scale)	(Left Band) [L SF6] (Right Band)	19	Level : +15 dBµ
	500.020 MHz (S3 level)	[R SF6] (Left Band) [L S37]	21	Set the SSG as;     Frequency : 500.020 MHz
		(Right Band) [R S37]	22	Level : -1 dBµ
	(Full scale)	(Left Band) [L SF7]	23	Level : +15 dBµ
	242.222.141	(Right Band) [R SF7]	24	
	910.020 MHz (S3 level)	(Left Band) [R S38]	25	• Set the SSG as; Frequency : 910.020 MHz Level : –1 dBµ
	(Full scale)	(Right Band) [R SF8]	26	Set the SSG as;     Level : +15 dBµ

#### ■ SQUELCH ADJUSTMENT

#### • CONNECTION FOR SQUELCH ADJUSTMENT



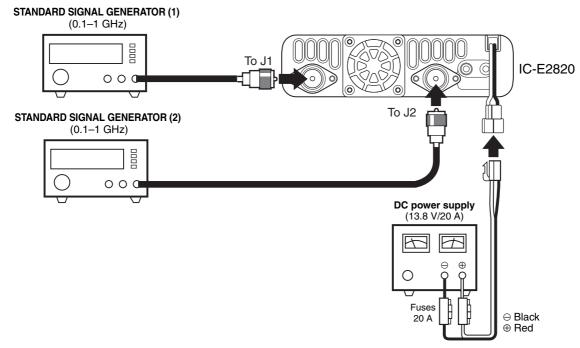
	ADJUSTMENT I	TEM		OPERATION	VALUE
SQUELCH	Connect a Term	inator (50 $\Omega$ ) to	the a	antenna connector (J1).	
	127.020 MHz	(FM) [L SQ1]	1		
		(FM) [R SQ1]	2		
		(FM-N) [L SQ1]	3		
		(FM-N) [R SQ1]	4		
	146.020 MHz	(FM) [L SQ2]	5		
		(FM) [R SQ2]	6		
		(FM-N) [L SQ2]	7		
		(FM-N) [R SQ2]	8		
	220.020 MHz	(FM) [L SQ3]	9		
		(FM-N) [L SQ3]	10	Duch the right hand's FMAIN-DANDI key	(Automatic
	300.020 MHz	(FM) [L SQ4]	11	Push the right band's [MAIN•BAND] key.	adjustment)
		(FM-N) [L SQ4]	12		
	387.020 MHz	(FM) [L SQ5]	13		
		(FM) [R SQ5]	14		
		(FM-N) [L SQ5]	15		
		(FM-N) [R SQ5]	16		
	440.020 MHz	(FM) [L SQ6]	17		
		(FM) [R SQ6]	18		
		(FM-N) [L SQ6]	19		
		(FM-N) [R SQ6]	20		

### ■ SQUELCH ADJUSTMENT (continued)

	ADJUSTMENT I	ГЕМ		OPERATION	VALUE
SQUELCH	500.020 MHz	(FM) [L SQ7]	21		
		(FM) [R SQ7]	22		
		(FM-N) [L SQ7]	23	Push the [MAIN•BAND] key.	(Automatic
		(FM-N) [R SQ7]	24	rusii iile [iviAliv-bAlvb] key.	adjustment)
	910.020 MHz	(FM) [R SQ8]	25		
		(FM-N) [R SQ8]	26		

#### **■ DIVERSITY ADJUSTMENT**

#### • CONNECTION FOR DIVERSITY ADJUSTMENT



	ADJUSTMENT I	TEM		ADJUSTMENT CONDITIONS	OPERATION	VALUE				
DIVERSITY	Connect a Stan	dard Signal Gen	erate	r to each antenna connector (J1 and J2) independently.						
	127.020 MHz (S0 level)	(Left Band) [L DL1]	1	Set the SSG as; Frequency : 127.020 MHz						
		(Right Band) [R DL1]	2	Level : –6 dBµ						
	(S3 level)	(Left Band) [L DM1]	3	Set the SSG as; Level : -1 dBµ	Push the right	(Automatic				
		(Right Band) [R DM1]	4		band's [MAIN• BAND] key.	adjustment)				
	(Full scale)	(Left Band) [L DH1]	5	Set the SSG as; Level : +15 dBµ						
		(Right Band) [R DH1]	6							

## **■ DIVERSITY ADJUSTMENT (continued)**

	ADJUSTMENT I	TEM			ADJUSTMENT CONDITIONS	OPERATION	VALUE
DIVERSITY	145.020 MHz (S0 level)	(Left Band) [L DL2]	1	• ;	Set the SSG as; Frequency : 145.020 MHz Level : –6 dBµ		
		(Right Band) [R DL2]	2		·		
	(S3 level)	(Left Band) [L DM2]	3	• ;	Set the SSG as; Level : -1 dBµ		
		(Right Band) [R DM2]	4				
	(Full scale)	(Left Band) [L DH2]	5	• ;	Set the SSG as; Level : +15 dBµ		
		(Right Band) [R DH2]	6				
	387.020 MHz (S0 level)	(Left Band) [L DL5]	1	• ;	Set the SSG as; Frequency : 387.020 MHz		
		(Right Band) [R DL5]	2		Level : –6 dBμ		
	(S3 level)	(Left Band) [L DM5]	3	• ;	Set the SSG as; Level : -1 dBµ		
		(Right Band) [R DM5]	4				
	(Full scale)	(Left Band) [L DH5]	5	• ;	Set the SSG as; Level : +15 dBµ		
		(Right Band) [R DH5]	6			Push the right	(Automatic
	435.020 MHz (S0 level)	(Left Band) [L DL6]	1	• ;	Set the SSG as; Frequency : 435.020 MHz	band's [MAIN• BAND] key.	adjustment)
		(Right Band) [R DL6]	2		Level : –6 dBμ	_	
	(S3 level)	(Left Band) [L DM6]	3	• ;	Set the SSG as; Level : -1 dBµ		
		(Right Band) [R DM6]	4				
	(Full scale)	(Left Band) [L DH6]	5	• ;	Set the SSG as; Level : +15 dBµ		
		(Right Band) [R DH6]	6				
	500.020 MHz (S0 level)	(Left Band) [L DL7]	1	• ;	Set the SSG as; Frequency : 500.020 MHz		
		(Right Band) [R DL7]	2		Level : –6 dBμ		
	(S3 level)	(Left Band) [L DM7]	3	• ;	Set the SSG as; Level : -1 dBµ		
		(Right Band) [R DM7]	4	1	·		
	(Full scale)	(Left Band) [L DH7]	5	• ;	Set the SSG as; Level : +15 dBµ		
		(Right Band) [R DH7]	6				

## **SECTION 6**

## **PARTS LIST**

#### [CONTROL UNIT]

#### [CONTROL UNIT]

[CON	[CONTROL UNIT] [CONTROL UNIT]									
REF NO.	ORDER NO.		DESCRIPTION	M.	H/V LOCATION	REF NO.	ORDER NO.	DESCRIPTION	М.	H/V LOCATION
IC3	1180000421	S.IC	TA78L05F (TE12R,F)	В	29.7/14.1	R155		S.RES ERJ3GEYJ 681 V (680)	В	88/44.9
IC6	1180002371		R1111N321B-TR-F	B B	42.4/18.8	R156	7030005050		В	105.5/45.4
IC9 IC10	1110005991 1110006380		S-80945CNMC-G9F-T2G LM2904PWR	В	35.8/18.5 111.3/23.3	R157 R158	7030005050 7030003420		B B	101.6/45.4 104.3/44.9
IC12	1130003831		TC7S04F (TE85R,F)	В	32.2/23.2	R159	7030003420		В	100.4/44.9
IC13	1140014060 1140014190		M30620FCPGP [EUR-01] M30622MAP-434GP [EUR-02]	B B	70.4/20.8 70.4/20.8	R160 R161	7030005050 7030005050		B	117.9/45.4 114/45.4
IC14	1130007111		TC7W04FU (TE12L,F)	В	60.3/40.1	R162	7030003420	S.RES ERJ3GEYJ 681 V (680)	В	116.7/44.9
						R163 R168	7030003420 7030005240		B	112.8/44.9 34.7/23.7
Q1	1530003990		2SC4738-BL (TE85L,F)	В	116.5/13.1	R169	7030008290	S.RES ERJ2GEJ 183 X (18 k)	В	24/24.3
Q3 Q14	1520000201 1530003990		2SB798-T2-AZ DK 2SC4738-BL (TE85L,F)	B B	120.6/16.8 98.2/9.9	R170 R171	7030005240 7030005040	S.RES ERJ2GEJ 473 X (47 k) S.RES ERJ2GEJ 472 X (4.7 k)	B	101.5/20.6 111.9/18.4
Q15	1510000771	S.TR	2SA1586-GR (TE85R,F)	В	98.2/14	R172	7030005050	S.RES ERJ2GEJ 103 X (10 k)	В	111.4/16.6
Q16 Q17	1530003990 1530003990		2SC4738-BL (TE85L,F) 2SC4738-BL (TE85L,F)	B B	43/47.5 39.1/47.5	R173 R174	7030008010 7030005050	S.RES ERJ2GEJ 123 X (12 k) S.RES ERJ2GEJ 103 X (10 k)	B	111.4/28.3 111/30
Q18	1530003990	S.TR	2SC4738-BL (TE85L,F)	В	55.4/47.5	R175	7030005240	S.RES ERJ2GEJ 473 X (47 k)	В	101.5/21.8
Q19 Q20	1530003990 1530003990		2SC4738-BL (TE85L,F) 2SC4738-BL (TE85L,F)	B B	51.5/47.5 67.8/47.5	R176 R177	7030004980 7030005050		B	115.7/40.6 100/11.2
Q21	1530003990	S.TR	2SC4738-BL (TE85L,F)	В	63.9/47.5	R178	7030005090	S.RES ERJ2GEJ 104 X (100 k)	В	98.2/8.1
Q22 Q23	1530003990 1530003990		2SC4738-BL (TE85L,F) 2SC4738-BL (TE85L,F)	B B	80.2/47.5 76.3/47.5	R179 R180	7030005240 7030005600		B	37.8/22 36.5/23.3
Q24	1530003990	S.TR	2SC4738-BL (TE85L,F)	В	92.6/47.5	R187	7030010040	S.RES ERJ2GEJ-JPW	В	63.2/13
Q25 Q26	1530003990 1530003990		2SC4738-BL (TE85L,F) 2SC4738-BL (TE85L,F)	B B	88.7/47.5 105/47.5	R188 R189	7030007570 7030007570		T	141.3/22.1 9.8/30.8
Q27	1530003990	S.TR	2SC4738-BL (TE85L,F)	В	101.1/47.5	R190	7410001130	S.ARY EXB28V102JX	В	80.2/25.3
Q28 Q29	1530003990 1530003990		2SC4738-BL (TE85L,F) 2SC4738-BL (TE85L,F)	B B	117.4/47.5 113.5/47.5	R191 R192	7410001130	S.ARY EXB28V102JX S.ARY EXB28V102JX	B	82.2/18.5 63.5/30.2
Q31	1530003990		2SC4738-BL (TE85L,F)	В	35.4/21.5	R195	7030005120	S.RES ERJ2GEJ 102 X (1 k)	В	78/27.5
						R196 R198	7030005240 7030005240		B	62.9/14.9 58.1/23
D4	1790001140	S.ZEN	MA8039-L (TX)	В	40.2/23.6	R199	7030005240	S.RES ERJ2GEJ 473 X (47 k)	В	58/25
D8 D9	1750000940		ISS400 TE61	B B	37/27.1	R200 R201	7030005240 7030005240	S.RES ERJ2GEJ 473 X (47 k)	B B	58/25.9
D10	1750000940 1750000940		ISS400 TE61 ISS400 TE61	В	35.6/25.4 27.9/24.9	R202	7030005240		В	58.3/26.8 58.3/27.7
D11	1750000940		ISS400 TE61	B B	27.9/21.7	R203	7030005240 7030005240	S.RES ERJ2GEJ 473 X (47 k)	B B	60.9/27.3
D12 D20	1790001170 1730002670		MA8068-M (TX) MA8130-M (TX)	В	120.5/12.5 98.1/23.8	R204 R205	7030005240		В	60.9/25.5 61.3/30.6
D21	1790001561	S.DIO	1SS372 (TE85R,F)	В	63.4/39.7	R206	7030005240	S.RES ERJ2GEJ 473 X (47 k)	В	62.8/28.4
D22 D23	1790001561 1790001561		1SS372 (TE85R,F) 1SS372 (TE85R,F)	B B	65.9/39.7 68.4/39.7	R207 R208	7030005240 7410001140		B	92.2/12.6 98.6/26.8
D24	1790001561		1SS372 (TE85R,F)	В	67.7/35.1	R209	7410001140	S.ARY EXB28V104JX	В	101/28.9
						R210 R211	7410001140 7410001140		B	81.7/16 81.4/13.3
X1	6050012500	S.XTL	CR-839 (FTX12.288M16SM)	В	54.6/12.5	R212	7030005240	S.RES ERJ2GEJ 473 X (47 k)	В	59.3/29.1
						R213 R216	7030010040 7030005240		B	65.4/29.5 54.9/26.7
L1	6200003640	S.COL	MLF1608E 100K-T	В	59.5/45.6	R218	7030005120	S.RES ERJ2GEJ 102 X (1 k)	В	68.4/32.9
						R219 R220	7030005240	S.RES ERJ2GEJ 473 X (47 k) S.RES ERJ2GEJ 102 X (1 k)	B	59/43.4 56.3/24.7
R2			ERJ2GEJ 103 X (10 k)	В	27.5/35.1	1	, 000000.20	Sin 26		00.0/2
R4 R6	7030005050 7030005050	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k)	B B	116.3/35.3 25.1/35.1	C1	4030016930	S.CER ECJ0EB1A104K	В	27.9/36.9
R8	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	118.7/35.3	C2	4030016930	S.CER ECJ0EB1A104K	В	115.7/36.9
R13 R14	7030005050 7030005090	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 104 X (100 k)	B B	110.5/14.3 14.6/32.9	C3 C4	4030016930 4030016930	S.CER ECJ0EB1A104K S.CER ECJ0EB1A104K	B	25.6/36.9 118.2/36.9
R21	7030003480	S.RES	ERJ3GEYJ 222 V (2.2 k)	В	113.4/14.3	C5	4030017430	S.CER ECJ0EC1H101J	В	108.3/14.3
R22 R24	7030005170 7030005050		ERJ2GEJ 474 X (470 k) ERJ2GEJ 103 X (10 k)	B B	118.1/19.8 25.5/24.7	C7 C8	4510008540	S.CER ECJ0EC1H470J S.ELE EEE1CA100SR	B	22.8/24.3 111/10.7
R25	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	25.8/22.5	C10	4030017420	S.CER ECJ0EC1H470J	В	24.2/22
R41 R72	7030005160 7410001220		ERJ2GEJ 105 X (1 M) EXB28V103JX	B B	58.4/8.6 53.2/18.7	C16 C24	4510008500	S.CER C1608 JB 0J 475K-T S.ELE EEE1CA101WP	B	75/10.7 38.5/11.7
R76	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	В	96/10.6	C25	4030016790	S.CER ECJ0EB1C103K	В	28.4/10.6
R77 R78	7030005170 7030005050	S.RES S.RES	ERJ2GEJ 474 X (470 k) ERJ2GEJ 103 X (10 k)	B B	98.2/11.6 16.1/32.4	C26 C27	4030017040	S.CER ECJ0EB1A333K S.CER ECJ0EB1E102K	B	38.6/18 28.4/17.6
R83	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	30.7/18.6	C28	4510008800	S.ELE EEE1EA100SR	В	22.3/17
R122 R123	7030005050 7030005050	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k)	B B	64.2/10.4 63.3/10.4	C29 C30	4030017460 4030017420	S.CER ECJ0EB1E102K S.CER ECJ0EC1H470J	B	18.2/17.8 15.6/30.1
R125	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	73.6/9.4	C31	4030017420	S.CER ECJ0EC1H470J	В	15.6/27.8
R126 R127	7030005050 7030005050	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k)	B B	72.7/9.4 71.8/9.4	C34 C42	4030016790 4030017460	S.CER ECJ0EB1C103K S.CER ECJ0EB1E102K	B	76.2/29.2 58.3/16.1
R128	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	68.7/8.8	C43	4030017460	S.CER ECJ0EB1E102K	В	59.8/15.7
R129 R130	7030005050 7030005050	S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k)	B B	67.8/8.8 66.9/7.5	C44 C45	4030017460	S.CER ECJ0EB1E102K S.CER ECJ0EB1E102K	B	55.3/16.1 56.7/15.7
R131	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	66/7.5	C46	4030016790	S.CER ECJ0EB1C103K	В	18.4/10.5
R132 R133	7030005050 7030005050	S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k)	B B	65.1/8.8 43.5/45.4	C47 C48	4030016790 4030016930	S.CER ECJ0EB1C103K S.CER ECJ0EB1A104K	B	123.9/12.3 100.2/14.4
R134			ERJ2GEJ 103 X (10 k)	В	39.6/45.4	C50	4030016790	S.CER ECJ0EB1C103K	В	40.7/25.4
R135 R136	7030003420 7030003420	S.RES	ERJ3GEYJ 681 V (680)	B B	42.3/44.9 38.4/44.9	C51 C54	4030016790 4510008660	S.CER ECJ0EB1C103K S.ELE EEE0JA220SR	B B	61.1/14.5 48.5/18.9
R136	7030003390	S.RES	ERJ3GEYJ 391 V (390)	В	114.5/8.4	C55	4510008660	S.ELE EEE0JA220SR	В	104.3/12.2
R138 R139	7030005010 7030005010	S.RES	ERJ2GEJ 681 X (680)	B B	76.1/6.7 48.9/8.1	C56 C57	4510008540 4550006840	S.ELE EEE1CA100SR S.TAN TEESVA 1E 225M8R	B B	45/12.1 90.5/25.2
R140	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	55.9/45.4	C59	4550006840	S.TAN TEESVA 1E 225M8R	В	95.1/25.2
R141 R142	7030005050 7030003420	S.RES	ERJ2GEJ 103 X (10 k) ERJ3GEYJ 681 V (680)	B B	52/45.4 54.7/44.9	C60 C61	4550000550 4550000550	S.TAN TEESVA 1V 224M8R	B B	83.4/25.1 72.5/32.7
R142 R143	7030003420			B	54.7/44.9 50.8/44.9	C62	4550000550	S.TAN TEESVA 1V 224M8R S.TAN TEESVA 1V 224M8R	B	72.5/32.7 72.7/34.8
R144	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	ВВ	68.3/45.4	C63	4550000550	S.TAN TEESVA 1V 224M8R	В	72.7/36.9
R145 R146	7030005050 7030003420			B	64.4/45.4 67.1/44.9	C64 C65	4550000550 4030018860	S.CER ECJ0EB0J105K	B B	72.6/39 96.8/26.2
R147	7030003420	S.RES	ERJ3GEYJ 681 V (680)	В	63.2/44.9	C66	4030018860	S.CER ECJ0EB0J105K S.CER ECJ0EB1C103K	В	49.8/30.1
R148 R149	7030005050 7030005050		ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k)	B B	80.7/45.4 76.8/45.4	C67 C68	4030016790	S.CER ECJ0EB1C103K S.CER ECJ0EB1C103K	B B	41.8/16.2 44.8/18.5
R150	7030003420	S.RES	ERJ3GEYJ 681 V (680)	В	79.5/44.9	C69	4030016790	S.CER ECJ0EB1C103K	В	29.6/23.7
R151 R152	7030003420 7030005050	S.RES	ERJ3GEYJ 681 V (680) ERJ2GEJ 103 X (10 k)	B B	75.6/44.9 93.1/45.4	C70 C71	4030017460 4510008550	S.CER ECJ0EB1E102K S.ELE EEE1HA010SR	B B	17.7/31.9 104.8/18.3
R153	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	89.2/45.4	C72	4510008550	S.ELE EEE1HA010SR	В	104.7/23.9
R154	7030003420	S.RES	ERJ3GEYJ 681 V (680)	В	91.9/44.9	C74	4030016790	S.CER ECJ0EB1C103K	В	113.5/26.7

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

#### [CONTROL UNIT]

## [MAIN UNIT]

	ONTROL UNIT										
REF NO.	ORDER NO.		DESCRIPTION	M.	H/V LOCATION	REF NO.	ORDER NO.		DESCRIPTION	M.	H/V LOCATION
C86			ECJ0EB1C103K	В	22.1/26	IC1	1110004310		M62352GP 75EC	Т	25/108.5
C87 C95	4030016790 4550006840		ECJ0EB1C103K TEESVA 1E 225M8R	B	116.1/25.4 52.3/24.5	IC2 IC3	1150002121 1150002161		S-AU82L (I,Q) S-AV32 (I2 Q)		
C101 C102	4550006840	S.TAN	TEESVA 1E 225M8R TEESVA 1E 225M8R	B B	93/25.2 88.3/25.2	IC4 IC8	1110004050 1190000350	S.IC	NJM3404AV-TE1-#FMZB M62363FP-650C	ВТ	39.8/107.5 52.5/24.3
C104	4030016790	S.CER	ECJ0EB1C103K	В	118.1/21	IC9	1130007021	S.IC	TC7S66FU (TE85L,F)	В	73.8/31.2
C105 C106			ECJ0EB1E102K ECJ0EB1A104K	B	33.4/19 76.2/28.3	IC11 IC12	1130008511 1130008511		TC7W53FU (TE12L,F) TC7W53FU (TE12L,F)	T	107.5/88.7 101.2/88.9
C107 C108	4030016930	S.CER	ECJ0EB1A104K ECJ0EB1C103K	B B	62/14.5 60.9/28.5	IC13 IC14	1130008511 1140005991	S.IC	TC7W53FU (TE12L,F) MB15A02PFV1-G-BND-ERE1	ВТ	58/39.7 25.3/47.3
C109	4030017660	S.CER	ECJ0EC1H330J	В	61.4/8.3	IC15	1110003201	S.IC	TA31136FNG (EL)	В	57.3/64.1
C110 C111			ECJ0EC1H330J TEESVA 1E 225M8R	B B	61.4/9.2 85.7/25.2	IC16 IC17	1130008511 1130007021	S.IC S.IC	TC7W53FU (TE12L,F) TC7S66FU (TE85L,F)	B	12.4/39 28.5/39.5
C113 C114	4030017330	S.CER	ECJ0EF1C104Z ECJ0EF1C104Z	B B	63.4/41.5 65.9/41.5	IC18 IC19	1110003201 1190002051	S.IC	TA31136FNG (EL) SPM5001-TL-E	ВТ	11.8/63.3 64.3/90.3
C115	4030017330	S.CER	ECJ0EF1C104Z	В	68.4/41.5	IC20	1190002051	S.IC	SPM5001-TL-E	T	14.9/90.5
C116 C117	4030017330	S.CER S.CER	ECJ0EF1C104Z ECJ0EF1C104Z	B B	69.2/37.2 62.5/37.8	IC21 IC22	1180001071 1140012950		TA7805F (TE16L,Q) 24LC512T-I/SM	B	107.1/136 112.6/98.2
C118 C119			ECJ0EF1C104Z ECJ0EF1C104Z	B	64.7/37.8 68/37.8	IC23 IC24	1110005991 1180001251		S-80945CNMC-G9F-T2G TA7808F (TE16L,Q)	T B	121/74.5 100.1/136
C120	4030017330	S.CER	ECJ0EF1C104Z	В	66/36.6	IC25	1140013520	S.IC	HD64F2506FC26DV	В	114.5/73.1
C121 C122			C1608 JB 1A 105K-T C1608 JB 1A 105K-T	B B	59.5/44.4 61.3/44.1	IC26 IC28	1110006490 1130007371	S.IC	LMV321IDCKR TA75S558F (TE85L,F)	T	116/65.9 22.1/27
						IC29 IC30	1130008511 1130011770		TC7W53FU (TE12L,F) CD4066BPWR	B	28.6/27 31.8/24.7
J3			B5B-ZR-SM4-TF (LF) (SN)	В	119.6/29.1	IC31	1130011770	S.IC	CD4066BPWR	T	70/6.3
J4 J5	6510025760		B5B-ZR-SM4-TF (LF) (SN) HJC0187-010024	В	24.6/29.1	IC32 IC33	1110005310 1130011860	S.IC	AN6123MS SM6451BT-G-E2	B	34.3/21.8 110.3/105.3
J7 J8			04-6240-034-001-800 04-6240-034-001-800	B	92.9/34.6 48.1/34.6	IC34 IC35	1130008511 1130011770		TC7W53FU (TE12L,F) CD4066BPWR	T B	101.6/34.1 70/8.2
J9			52465-1071	-	10.1701.0	IC36	1130013010	S.IC	SN74AHC1G08DCK3	B	120.3/104.3
						IC37 IC38	1130008511 1110002541	IC	TC7W53FU (TE12L,F) LA4445-E	-	114.2/30.2
DS1 DS21	5030003040 5040002930		M6-0103TRM-5 SML-512MW T86	Т	33/6.7	IC41 IC42	1140005991 1130007021		MB15A02PFV1-G-BND-ERE1 TC7S66FU (TE85L,F)	T	69.9/47.3 74.8/37.5
DS22 DS23	5040002930 5040002930	S.LED	SML-512MW T86	T	137.1/30 137.1/23.4	IC43 IC44	1110004460 1110006870	S.IC	uPB1509GV-E1 uPC2709TB-E3	T	77.6/57.8
DS24	5040002930	S.LED	SML-512MW T86 SML-512MW T86	Т	59/6.7	IC45	1110006870	S.IC	uPC2709TB-E3	T	90.2/57 42.4/56.2
DS25 DS26	5040002930 5040002930		SML-512MW T86 SML-512MW T86	T	72/6.7 46/6.7	IC46 IC48	1120003020 1110006350		MAX3221IPWR LM2902PWR	T	94.4/9.9 65.8/18
DS27 DS28	5040002930 5040002930	S.LED	SML-512MW T86 SML-512MW T86	T	85/6.7 98/6.7	IC49 IC50	1110006740 1110006490	S.IC	LMV358IPWR LMV321IDCKR	ВТ	104.7/32.5 100.1/28.3
DS29	5040002930	S.LED	SML-512MW T86	T	111/6.7	IC51	1130008511	S.IC	TC7W53FU (TE12L,F)	T	67.9/22.8
DS31 DS32	5040003260 5040003260		FAMG1211F-TR FAMG1211F-TR	T	34.8/48 47.2/48	IC52 IC53	1130008511 1110006490		TC7W53FU (TE12L,F) LMV321IDCKR	B	35.1/27 58.1/26.9
DS33 DS34	5040003260 5040003260	S.LED	FAMG1211F-TR FAMG1211F-TR	T	59.6/48 72/48	IC54 IC55	1110004310 1190002500	S.IC	M62352GP 75EC ZXCT1022E5TA	T	96.5/96.9 111.9/122.6
DS35	5040003260	S.LED	FAMG1211F-TR	Т	84.4/48	IC56	1130012960	S.IC	BU8872FS-E2	В	119.3/53.4
DS36 DS37	5040003260 5040003260		FAMG1211F-TR FAMG1211F-TR	T	96.8/48 109.2/48	IC57 IC58	1130008511 1130008511		TC7W53FU (TE12L,F) TC7W53FU (TE12L,F)	T	108.4/54.7 115.7/54
DS38 DS39	5040002930		SML-512MW T86 SML-512MW T86	T	6.9/23.4 6.9/30	IC59 IC60	1130004201 1130008511	S.IC	TC4S66F (TE85R,F) TC7W53FU (TE12L,F)	T B	111.8/100.7 65/34.4
	0010002000	O.LLD	CINE OTEMWY 100	'	0.0/00	IC61	1130008511	S.IC	TC7W53FU (TE12L,F)	В	21.4/33.8
S5	2260001890	S.SW	SKQDPA	Т	33/3.2	IC62 IC63	1110006870 1130007021		uPC2709TB-E3 TC7S66FU (TE85L,F)	T B	32.7/59.8 47.1/32.4
S6 S7	2260001890 2260001890		SKQDPA SKQDPA	T	46/3.2 98/3.2						
S8	2260001890	S.SW	SKQDPA	Ť	111/3.2	Q1	1590001650		XP4601 (TX)	B T	100.8/99.4 7.1/117
	2260001890 2260001890	S.SW		Т	137.1/26.7 59/3.2	Q2 Q3	1590001650 1590003240	S.TR	XP4601 (TX) UNR9114J-(TX)	В	89.2/102.2
S12 S13	2260001890 2260001890		SKQDPA SKQDPA	T	72/3.2 85/3.2	Q4 Q5	1590003240 1590003240	S.TR S.TR	UNR9114J-(TX) UNR9114J-(TX)	T B	23.6/103.1 89.1/100.1
S14 S15	2260001890 2250000570		SKQDPA SW-169 (EC09E1524405)	Т	6.9/26.7	Q6 Q7	1590003240 1590003240	S.TR	UNR9114J-(TX) UNR9114J-(TX)	B	89.5/104.2 88.6/108.2
S16	2250000570		SW-169 (EC09E1524405)			Q8	1590003240	S.TR	UNR9114J-(TX)	В	99.9/94.5
						Q9 Q10	1590003240 1590003240 1590003240	S.TR	UNR9114J-(TX) UNR9114J-(TX)	T B	25.7/103.1 89.6/106.2
EP9 EP10	6910012350 6910012350		MMZ1608Y 102BT MMZ1608Y 102BT	B	16/17.3 15.3/26.6	Q11 Q12	1590003240 1590003290	S.TR S.TR	UNR9114J-(TX) UNR9213J-(TX)	T	6/121.5 88.4/75
EP11 EP12	6910012350	S.BEA	MMZ1608Y 102BT	B	15.3/29	Q13 Q14	1590003290 1530003990	S.TR	UNR9213J-(TX) 2SC4738-BL (TE85L,F)	T	46.5/81.3
EP 12	0910012330	S.DEA	MMZ1608Y 102BT		15.3/31.3	Q15	1510000581	S.TR	2SA1362-GR (TE85R,F)	Ť	20.9/127.8 83.9/76.2
						Q16 Q17	1530003990 1510000581	S.TR S.TR	2SC4738-BL (TE85L,F) 2SA1362-GR (TE85R,F)	T	103.2/104.4 46.1/76.2
						Q18 Q19	1530003581	S.TR	2SC5231C8-TL-E 3SK324UG-TL-E	T	10.8/109.8 15.7/112.8
						Q20	1580000800 1580000800		3SK324UG-TL-E	T	86/107.4
						Q21 Q22	1530003990 1530003231	S.TR S.TR	2SC4738-BL (TE85L,F) 2SC5085-Y (TE85R,F)	T B	45.7/123.3 42.6/72
						Q23 Q25	1530003231 1530003781 1530002680	S.TR	2SC5624VH-TL-E 2SC3357-T1	T	11.2/124.4 87.5/74.9
						Q26	1530002680	STR	2SC3357-T1	В	43.1/79.7
						Q27 Q28	1530003291 1580000800	S.FET	2SC4703-T1 SE 3SK324UG-TL-E	B	87.5/80.9 28/130.5
						Q29 Q30	1580000800 1530003990	S.FET	3SK324UG-TL-E 2SC4738-BL (TE85L,F)	Ť	101.2/115.5 26.7/127.9
						Q31	1590003230	S.TR	UNR9113J-(TX)	В	39.2/104.4
						Q32 Q33	1580000790 1580000790	S.FET	3SK318YB-TL-E 3SK318YB-TL-E	T	38.5/105.7 70.4/109.6
						Q34 Q35	1530003781	S.TR	2SC5624VH-TL-E 2SC5624VH-TL-E	T	54.2/105.5 60.7/105.5
						Q36	1530003781 1590003230	S.TR	UNR9113J-(TX)	В	43.3/104.3
						Q37 Q38	1580000790 1530003990	S.TR	3SK318YB-TL-E 2SC4738-BL (TE85L,F)	T	57.4/137.1 63.5/114.6
						Q39 Q40	1580000790 1530003990	S.FET	3SK318YB-TL-E 2SC4738-BL (TE85L,F)	T	82.4/120.1 35.5/144.8
						Q41	1590003990 1590001650 1590001650	S.TR	XP4601 (TX)	T	112.6/83.1
						Q42 Q43	1590001650 1590003260		XP4601 (TX) UNR911NJ-(TX)	B	101.8/90.7 60.7/43.3
						Q44 Q45	1590003260 1590003240	S.TR	UNR911NJ-(TX) UNR9114J-(TX)	T	6/90.9 6/37
						Q46	1590003240	S.TR	UNR9114J-(TX)	T	57.2/38.9
						Q47 Q48	1590001190 1590001190	S.TR	XP6501-(TX) .AB XP6501-(TX) .AB	T	115.4/94.5 107.9/95.9
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M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

REF NO.	ORDER NO.		DESCRIPTION	M.	H/V LOCATION		
Q49	1590003290	S.TR	UNR9213J-(TX)	Т	102.9/93.5		
Q50	1590003290	S.TR	UNR9213J-(TX)	Т	113.8/89.6		
Q52 Q53	1530003990 1590003230	S.TR S.TR	2SC4738-BL (TE85L,F) UNR9113J-(TX)	B	25.4/47.8 57/70.6		
Q54	1590003270		UNR9210J-(TX)	Τ̈́	59/71.2		
Q55	1590001190	S.TR	XP6501-(TX) .ÁB	В	52.3/40.5		
Q56 Q57	1590003230 1590001190	S.TR S.TR	UNR9113J-(TX) XP6501-(TX) .AB	T	54.9/70.5 53.7/43		
257 258	1530003990	S.TR	2SC4738-BL (TE85L,F)	В	82.9/46.3		
259	1590003290	S.TR	UNR9213J-(TX)	Т	55/68.4		
260 261	1530003321	S.TR	2SC5108-Y (TE85R,F)	T	37.2/48.9		
Q61 Q62	1510000771 1530002691	S.TR S.TR	2SA1586-GR (TE85R,F) 2SC4116-GR (TE85R,F)	T	25.1/41.5 23.5/39.1		
Q63	1590001190		XP6501-(TX) .AB	B	6/39.8		
264	1590003290	S.TR	UNR9213J-(TX)	В	40.6/38.1		
265 266	1590001650 1530003221	S.TR S.TR	XP4601 (TX) 2SC4406-4-TL-E	B	39.3/41 63.3/66.2		
267	1590001190	S.TR	XP6501-(TX) .AB	T	7.1/42.1		
268	1590001650	S.TR	XP4601 (TX)	В	39.3/44.6		
Q69 Q70	1590003230 1590003270	S.TR S.TR	UNR9113J-(TX) UNR9210J-(TX)	T	12/70 14.2/70		
271	1590003230	S.TR	UNR9113J-(TX)	Τ̈́	9.7/69.9		
272	1530003581	S.TR	2SC5231C8-TL-E	T	38.4/42.6		
273 274	1530003581 1530003581	S.TR S.TR	2SC5231C8-TL-E 2SC5231C8-TL-E	T	44.7/38.4 41.4/43.2		
274 275	1530003381	S.TR	2SC4406-4-TL-E	В	18.5/66.2		
276	1530003581	S.TR	2SC5231C8-TL-E	Т	45.8/42.4		
279 201	1590003290	S.TR	UNR9213J-(TX)	T	41.2/66.6		
281 282	1520000460 1590003450	S.TR S.TR	2SB1132 T100 R UNR9214J-(TX)	B	101.6/127 106.5/104.		
283	1510000671	S.TR	2SA1588-GR (TE85R, F)	В	103.9/103		
284	1510000671	S.TR	2SA1588-GR (TE85R, F)	В	99.9/104.7		
Q86 Q87	1530003990 1530003990	S.TR S.TR	2SC4738-BL (TE85L,F) 2SC4738-BL (TE85L,F)	B	6.7/31.4 15.3/30.5		
288 288	1590003990		UNR9213J-(TX)	Т	21.1/21.7		
290	1590003290	S.TR	UNR9213J-(TX)	Т	31.5/20.9		
Q91	1590003290	S.TR	UNR9213J-(TX)	T	64.4/8.5		
Q92 Q93	1590003230 1590003290	S.TR S.TR	UNR9113J-(TX) UNR9213J-(TX)	T	44.3/10.8 58.6/9.4		
294	1510000581	S.TR	2SA1362-GR (TE85R,F)	Ť	115.4/38.4		
Q95	1590003290		UNR9213J-(TX)	В	70/12		
Q96 Q97	1520000201 1530003990	S.TR S.TR	2SB798-T2-AZ DK 2SC4738-BL (TE85L,F)	T	124.5/36.5 120.9/38.6		
297 298	1590003990	S.TR	UNR9210J-(TX)	В	117.1/99.9		
299	1590002270	S.TR	UMG9NTR	Т	75.5/22.3		
2100	1590003290	S.TR	UNR9213J-(TX)	T	113.3/71.4		
Q101 Q102	1530003091 1530003091	S.TR S.TR	2SC4213-B (TE85R,F) 2SC4213-B (TE85R,F)	¦	128/111.5 123/109.1		
2103	1530003091	S.TR	2SC4213-B (TE85R,F)	Ť	125.5/109.		
Q104	1590003260	S.TR	UNR911NJ-(TX)	В	74/44.4		
Q105 Q106	1530003990 1590003260	S.TR S.TR	2SC4738-BL (TÉ85L,F) UNR911NJ-(TX)	B	70/47.4 82.2/56.4		
Q100 Q109	1590003290	S.TR	UNR9213J-(TX)	<del>†</del>	78.7/43.8		
Q110	1590003300	S.TR	UNR921NJ-(TX)	Т	89.1/35.5		
2111	1530003581	S.TR S.TR	2SC5231C8-TL-E	T	88.5/42.4		
Q112 Q113	1530003321 1530003581	S.TR	2SC5108-Y (TE85R,F) 2SC5231C8-TL-E	Ϊ́	82.1/49.1 90.4/46.9		
Q115	1590003290	S.TR	UNR9213J-(TX)	Т	85.8/55.7		
2116	1530003321	S.TR	2SC5108-Y (TE85R,F)	T	77.4/63		
Q117 Q118	1590003290 1590003290	S.TR S.TR	UNR9213J-(TX) UNR9213J-(TX)	¦	9.7/67.7 116.6/42.8		
Q119	1560000811		2SK1069-4-TL-E	B	71.6/36		
Q120	1560000811	S.FET	2SK1069-4-TL-E	В	29.3/34.4		
Q121 Q122	1590003290 1590003290		UNR9213J-(TX) UNR9213J-(TX)	T B	76.8/39.4 30.6/41.7		
Q123	1520000450		2SB1132 T100 Q	T	49.8/121.7		
D1 D2	1790001240 1790001240		MA2S728-(TX) MA2S728-(TX)	T T	12.7/117.1 89.8/108.9		
)3	1790001240		MA2S728-(TX)	Т	70.5/113.1		
D4	1790001240	S.DIO	MA2S728-(TX)	Т	37/108.6		
D5 D6	1790001240 1790001240		MA2S728-(TX) MA2S728-(TX)	T	57/106.8 63.5/106.8		
D6 D7	1790001240		MA2S077-(TX)	T	14.1/97		
D8	1790001260	S.DIO	MA2S077-(TX)	Т	71.2/98.4		
D9	1790001260		MA2S077-(TX)	T	10.4/97		
D10 D11	1790001621 1790001621	S.DIO S.DIO	1SV308 (TPL3,F) 1SV308 (TPL3,F)	T	16.7/100.8 75.7/98.4		
012	1750007021	S.VCP	HVC375BTRF-E	Т	14.9/102.5		
D13	1750000721	S.VCP	HVC375BTRF-E	Т	76.4/101.5		
D14 D15	1750000721	S.VCP S.VCP	HVC375BTRF-E	T	14.9/105.2		
D15 D16	1750000721 1790001621	S.VCP S.DIO	HVC375BTRF-E 1SV308 (TPL3,F)	l ¦	78.4/103.3 16.7/108.3		
D17	1790001621	S.DIO	1SV308 (TPL3,F)	Т	82.2/104.8		
D18	1790001621	S.DIO	1SV308 (TPL3,F)	Т	18.3/116.8		
D19	1790001621	S.DIO	1SV308 (TPL3,F)	T	90.8/104.5		
D20 D21	1750000721 1750000721	S.VCP S.VCP	HVC375BTRF-E HVC375BTRF-E	¦	16.1/119.4 94.2/106.2		
D22	1790001621	S.DIO	1SV308 (TPL3,F)	Т	11.8/130.1		
023	1750000721	S.VCP	HVC375BTRF-E	Ţ	16.1/120.6		
D24 D25	1750000721	S.VCP	HVC375BTRF-E	T B	96.8/106.2		
D25 D26	1790001250 1790001621	S.DIO S.DIO	MA2S111-(TX) 1SV308 (TPL3,F)	L	38.1/77.6 17.4/123.1		
D27	1790001621	S.DIO	1SV308 (TPL3,F)	Т	99.6/103.7		
028	1720000241	S.DIO	1SV172 (TE85R,F)	Т	100.2/109.		
	1790001250	S.DIO	MA2S111-(TX)	В	82.8/78.4		
	1720000241	S.DIO S.DIO	1SV172 (TE85R,F) DAN222TL	T B	15.2/127 41.8/88.2		
D30	1750000520						
D30 D31	1750000520 1790001250		MA2S111-(TX)	Т			
030 031 032 035	1790001250 1790001260	S.DIO S.DIO	MA2S077-(TX)	Т	23.3/127.5 21.2/98.8		
D29 D30 D31 D32 D35 D36 D37	1790001250	S.DIO			23.3/127.5 21.2/98.8 53.6/96.8 60/96.8		

<b>REF</b> <b>NO.</b> D39 D40	ORDER NO.		[MAIN UNIT]												
	110.		DESCRIPTIO	N	М.	H/V LOCATION									
U40	1790000980	S.DIO	MA742 (TX)		В	76.8/133.6									
D41	1750000711 1750000711	S.VCP S.VCP	HVC350BTRF-E HVC350BTRF-E		T	30/101.3 67.8/103.5									
D42	1790000980	S.DIO	MA742 (TX)		В	41/113.9									
D43 D44	1750000711	S.VCP S.VCP	HVC350BTRF-E		T	32.7/101.3									
D44 D45	1750000711 1750000711	S.VCP	HVC350BTRF-E HVC350BTRF-E		†	67.8/104.8 56.8/102.5									
D46	1750000721	S.VCP	HVC375BTRF-E		T	63.3/102.5									
D47 D48	1790000980 1790001250	S.DIO S.DIO	MA742 (TX) MA2S111-(TX)		B T	74.9/139.4 33.9/136.3									
D49	1790001250	S.DIO	MA2S111-(TX)		Т	35.1/136.3									
D50 D51	1750000721 1750000711	S.VCP S.VCP	HVC375BTRF-E HVC350BTRF-E		T	62.1/109 55.6/109									
D52	1790000980	S.DIO	MA742 (TX)		В	30.2/133.8									
D53 D54	1790001260	S.DIO S.VCP	MA2S077-(TX)		T	40.3/137.9									
D55	1750000711 1750000711	S.VCP	HVC350BTRF-E HVC350BTRF-E		†	45.9/110.1 74.1/116.8									
D56	1790001260	S.DIO S.DIO	MA2S077-(TX)		T	55.6/111.5									
D57 D58	1790001260 1750000711	S.VCP	MA2S077-(TX) HVC350BTRF-E		†	58.6/111.5 48.6/110.1									
D59	1750001360	S.DIO	L709CER (9401)		В	78.7/150.1									
D60 D61	1750000711 1750001360	S.VCP S.DIO	HVC350BTRF-E L709CER (9401)		T B	74.1/118.1 32.5/143.2									
D62	1750001360	S.DIO	L709CER (9401)		В	42.6/138.2									
D63 D64	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		T	106.5/119.7 90.6/118.6									
D65	1790001260	S.DIO	MA2S077-(TX)		Т	94.8/122.3									
D66 D67	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		T	108.1/117.8 91.9/118.6									
D68	1720000241	S.DIO	1SV172 (TE85R,F)		Ť	73.7/125.4									
D69	1790001260	S.DIO	MA2S077-(TX)		T T	108.4/123.2									
D70 D71	1720000241 1790001260	S.DIO S.DIO	1SV172 (TE85R,F) MA2S077-(TX)		†	54.9/119.7 93.7/125.7									
D72	1790001621	S.DIO	1SV308 (TPL3,F)		Т	100.6/128.									
D73 D74	1790001260 1790001621	S.DIO S.DIO	MA2S077-(TX) 1SV308 (TPL3,F)		T T	108/128.9 106.2/132.4									
D75	1750001360	S.DIO	L709CER (9401)		В	69.5/145.4									
D76 D77	1790001250 1790001260	S.DIO S.DIO	MA2S111-(TX) MA2S077-(TX)		T T	65.9/115 66.8/140.6									
D78	1790001250	S.DIO	MA2S111-(TX)		†	62.2/142.3									
D79	1790001250	S.DIO	MA2S111-(TX)		Ţ	63.4/142.3									
D80 D81	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		T B	33.6/144.7 29.7/49.9									
D82	1790001250	S.DIO	MA2S111-(TX)		Т	54.2/57.9									
D83 D84	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		T	54.2/50.4 61.2/57.8									
D85	1790001250	S.DIO	MA2S111-(TX)		Ť	61.2/50.3									
D86 D87	1750000370	S.DIO S.VCP	DA221 TL HVC321B1TRF-E		T	22.5/43.2									
D88	1720000791 1750000370	S.DIO	DA221 TL		В	35.6/37 65.5/68.4									
D89	1750000831	S.VCP	HVC362TRF-E		Ţ	31.5/41.8									
D90 D91	1750000831 1750000721	S.VCP S.VCP	HVC362TRF-E HVC375BTRF-E		T	33.1/40.1 38.9/35.6									
D92	1750000711	S.VCP	HVC350BTRF-E		Ţ	38.9/34.4									
D93 D94	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		T	8.9/57.1 8.1/49.5									
D95	1790001250	S.DIO	MA2S111-(TX)		Т	16.3/56.9									
D96 D97	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		T	16.3/49.4 43.2/41.6									
D100	17500001230	S.DIO	DA221 TL		В	20.7/68.4									
D101	1790001260	S.DIO	MA2S077-(TX) MA2S077-(TX)		Ţ	37.1/57.1									
D102 D103	1790001260 1790001621	S.DIO S.DIO	1SV308 (TPL3,F)		T	44.3/48.5 44/61.2									
D104	1790001260	S.DIO	MA2S077-(TX)		Ţ	40.2/57.9									
D106 D107	1790001260 1790001260	S.DIO S.DIO	MA2S077-(TX) MA2S077-(TX)		T	33.6/69.9 37.3/69.9									
D108	1790001260	S.DIO	MA2S077-(TX)		Т	38.5/69.9									
D109 D112	1790001250 1750000520	S.DIO S.DIO	MA2S111-(TX) DAN222TL		T B	41.9/63.4 85.9/102.2									
D113	1750000520	S.DIO	DAN222TL		В	85.9/104.2									
D116 D117	1790001250 1730000521	S.DIO ZEN	MA2S111-(TX) RD20E-AZ B2		Т	8.2/121.7									
D118	1790000700	DIO	DSA3A1												
D119 D120	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		B B	104.2/105 105.7/106.									
D121	1790001250	S.DIO	MA2S111-(TX)		В	10.4/29.7									
D122 D124	1730002340	S.ZEN	MA8047-M (TX)		T	119.2/64									
D124 D125	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		†	104/76.2 104/77.4									
D126	1790001250	S.DIO	MA2S111-(TX)		Ţ	104/78.6									
D127 D128	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)	[EUR-02] only	T	104/79.8 106.5/76.2									
D129	1790001250	S.DIO	MA2S111-(TX)	[EUR-02] only	Т	106.5/77.4									
D133 D134	1790001250 1790001250	S.DIO S.DIO	MA2S111-(TX) MA2S111-(TX)		T	104/72.6 104/73.8									
D135	1790001250	S.DIO	MA2S111-(TX)		Т	104/75									
D136	1790001250	S.DIO	MA2S111-(TX)		T T	106.5/71.4									
D140 D141	1750000370 1790001250	S.DIO S.DIO	DA221 TL MA2S111-(TX)		+	50/12.3 120.9/40.3									
D142	1790000980	S.DIO	MA742 (TX)		В	117.7/102.									
D143 D145	1790001250 1720000791	S.DIO S.VCP	MA2S111-(TX) HVC321B1TRF-E		B T	74.6/50.8 83/38.9									
D146	1720000791	S.VCP	HVC321B1TRF-E		Т	83.8/37.2									
D147	1720000791	S.VCP S.DIO	HVC321B1TRF-E		T T	81.8/41.4									
D148 D150	1790001260 1790001260	S.DIO	MA2S077-(TX) MA2S077-(TX)		Т	84.7/35.4 86.9/58.4									
D151	1790001260	S.DIO	MA2S077-(TX)		Т	86.9/60.8									
D152 D153	1790001260 1790001260	S.DIO S.DIO	MA2S077-(TX) MA2S077-(TX)		T T	86.9/59.6 82.5/70.7									
D154	1790001260	S.DIO	MA2S077-(TX)		Т	80.7/70									
D155	1790001621 1790001260	S.DIO S.DIO	1SV308 (TPL3,F) MA2S077-(TX)		T T	88.4/63.5 77.1/70									
ロルわら		S.DIO	1SV308 (TPL3,F)		Т	89.3/65.5									
D156 D157 D159	1790001621 1790001260	S.DIO	MA2S077-(TX)		TI	38.9/57.9									

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

# [MAIN UNIT] REF ORDER NO. NO.

LIVIAII	011111			[MAIN ONIT]								
REF NO.	ORDER NO.		DESCRIPTION	M.	H/V LOCATION	REF NO.	ORDER NO.		DESCRIPTION		M.	H/V LOCATION
		0.010	111000== (T)()	_			_	0.001	M 54000 A 4 DOL ( T		_	
D160 D161	1790001260 1750000771			T B	43/48.5 123.3/87.8	L79 L80			MLF1608A 1R0K-T AS080440-22N		T B	102.4/127.3 38.9/150.6
D162	1750000771	S.VCP	HVC376BTRF-E	В	122.3/89.6	L81			LQW18AN82NG00D		Т	84.2/116.9
D164	1750000771 1790001250			В	114.7/88.1	L82	6200012900	S.COL	0.30-2.0-7TL 57.2N		T	97.5/128.1
D165 D166	1750000940	S.DIO	ISS400 TE61 ISS400 TE61	T	123.9/27.3 125.1/27.3	L83 L84			MLF1608A 1R0K-T LQW18AN15NG00D		T	108.1/131.6 105.7/125.8
D166	1750000940 1750000940	S.DIO	ISS400 TE61	Ϊ́Τ	122.7/26.4	L85	6200009250	S.COL	LQW18ANR22G00D		†	56/135.1
D168	1750000940	S.DIO	ISS400 TE61	T	120.6/26.4	L86	6200012980	S.COL	0.40-1.4-5TR 18.3N		Τ	105.4/130
D169	1790001520	S.ZEN	MA8075-L (TX)	Т	47.3/125.2	L87 L88	6200009250	S.COL	LQW18ANR22G00D AS080547-47N		T B	80.4/121.5 65.4/152.4
						L89			AS080747-68N		В	73.6/146.9
FI1	2020002390		LT450HW <jje></jje>			L90	6200012760	S.COL	0.35-1.6-7TL 37.5N		T	99.5/133.2
FI2 FI3	2020002250 2020002390		LT450EW <jje> LT450HW <jje></jje></jje>			L91 L92			LQW18AN82NG00D AS080647-56N		T B	62.7/139.8 58.9/149.2
FI4	2020002250	CER	IT450FW <.I.IF>			L93			0.35-1.6-8TL 45.5N		Т	101/136.5
FI5			FL-408 (38.850 MHz)	В	71/69.6	L94			0.35-1.6-8TL 45.5N		T	70.3/143.9
FI6	2030000600	S.MLH	FL-409 (46.350 MHz)	В	26.1/68.9	L95 L96			0.45-1.4-4TL 12.1N AS080547-47N		T B	106.6/136.1 50/153
						L97	6200011660	S.COL	LQW18ANR15G00D		T	61/142.4
X1			CR-783 (15.3 MHz)	В	23.3/43.4	L98	6200012760	S.COL	0.35-1.6-7TL 37.5N		T	102.5/139.9
X2 X3	6070000290 6070000290		JTB450C24 <jje> JTB450C24 <jje></jje></jje>			L99 L100	6200012960	S.COL	0.45-1.4-4TL 12.1N ELJRE 39NGFA		T	107.4/140 26.8/152.3
X4	6050012530		CR-841 (SMD49/19.6608 MHz)	В	126.6/88.1	L101			AS100340-10N		В	30.6/153.9
X5	6050012450		CR-833 (12.800 MHz)	В	67.9/43.4	L102	6200010130	S.COL	LQW18AN6N8C00D		Ţ	12.7/134.3
X6	6050012480	S.XIL	CR-838 (SMD-49/4.194304 MHz)	В	126.6/54.7	L103 L104			0.30-0.91-4TL 8.6N AS080440-22N		T B	100.8/143 25.3/148.6
						L105	6200010130	S.COL	LQW18AN6N8C00D		Т	12.7/135.6
L1			ELJRE 33NGFA	T	16/97.8	L106	6200012980	S.COL	0.40-1.4-5TR 18.3N		T	100.8/147
L2 L3	6200005721	S.COL	ELJRE 33NGFA	T	72.4/98.4 11.1/98.8	L107 L108			LQW18AN6N8C00D AS080340-15N		T B	12.7/136.9 18.1/148.2
L4	6200009220	S.COL	ELJRE R10GFA LQW18AN15NG00D	Τ̈́	14.9/101.3	L109	6200012920	S.COL	0.20-1.0-4TL 12.1N		T	99.2/149.9
L5	6200009220	S.COL	LQW18AN15NG00D	T	75.6/100.6	L110				R-01]	T	15.4/143.1
L6 L7	6200003550	S.COL	MLF1608A 4R7K-T MLF1608A 4R7K-T	T	17.4/99 75.6/97.2	L111	6200012620	S.COL	0.30-0.8-3TL 4.3N [EUF MLF1608D R82K-T	R-02]	T B	15.4/143.1 24.8/50.8
L8	6200010130	S.COL	LQW18AN6N8C00D	Ϊ́Τ	11.5/108.1	L112			MLF1608D R22K-T		В	27.9/47.9
L9	6200005741	S.COL	ELJRE 47NGFA LQW18AN15NG00D	В	89.4/67	L113	6200005701	S.COL	ELJRE 22NGFA		T	30.9/49.3
L10 L11	6200009220	S.COL	LQW18AN15NG00D ELJRE 47NGFA	T B	14.9/106.4 91.3/67.8	L114 L115			ELJRE 47NGFA NLV25T-R18J		T	35.5/48.6 32.4/37
L12	6200003741	S.COL	LQW18AN15NG00D	T	79.2/104.2	L116	6200002651	S.COL	NLV25T-R18J		Т	35.9/35
L13	6200003550	S.COL	LQW18AN15NG00D MLF1608A 4R7K-T	T	18.5/107.6	L117	6200010100	S.COL	C2012C-33NG-A		T	33.2/42.3
L15 L16	6200003550	S.COL	MLF1608A 4R7K-T	T	81.2/104.1 14.9/110.1	L118 L119			C2012C-15NG-A NLV25T-1R8J		T B	41.3/35.5 75.8/74.9
L17	6200005671	S.COL	LQW18AN18NG00D ELJRE 12NGFA	Ϊ́Τ	10.4/113.1	L119			ELJRE R15JFA		T	41.1/44.9
L18	6200009070	S.COL	LQW18AN18NG00D	Т	82.4/107.5	L121	6200005731	S.COL	ELJRE 39NGFA		Т	45.3/44.1
L19 L20	6200005731	S.COL	ELJRE 39NGFA LQW18AN6N8C00D	B T	43.6/67.5 11.3/122.5	L122 L123	6130003000	S.COL	#617DB-1714=P3 ELJRE 39NGFA		T	64.4/83.6 37.4/64.4
L21	6200003550	S.COL	MLF1608A 4R7K-T	<del>'</del>	19/115	L123			ELJRE 18NGFA		†	45.7/64.4
L22	6200005721	S.COL	ELJRE 33NGFA 0.26-1.0-5TL 12N	В	43.4/74.9	L125	6200005731	S.COL	ELJRE 39NGFA		Т	36.2/65.9
L23 L24	6200012520	S.COL	0.26-1.0-5TL 12N	T	16.4/117.7 89.6/104.5	L126 L127			#617DB-1714=P3 #617DB-1714=P3		T	70.8/84.2 71.1/90.4
L24 L25	6200005550	S.COL	MLF1608A 4R7K-T ELJRE 18NGFA	В	85.4/71.7	L127			LQW18AN15NG00D		†	31.6/62.2
L26	6200005691	S.COL	ELJRE 18NGFA ELJRE 18NGFA	В	38.3/74.9	L130	6200005671	S.COL	ELJRE 12NGFA		T	32.4/64.3
L27 L28	6200012520	S.COL	0.26-1.0-5TL 12N	T B	92.5/106.1 83.6/75.9	L131 L132			ELJRE 22NGFA #617DB-1714=P3		T	39.4/63.8 14.9/83.9
L29	6200005741	S.COL	ELJRE 47NGFA ELJRE 10NGFA	В	39.9/77.5	L133	6200005671	S.COL	ELJRE 12NGFA		Ť	32.4/66.2
L30	6200010130	S.COL	LQW18AN6N8C00D	T	11.8/131.4	L134	6200005701	S.COL	ELJRE 22NGFA		T	39.4/67.3
L31 L32	6200012520	S.COL	0.26-1.0-5TL 12N MLF1608A 4R7K-T	T	15.4/122.3 16.9/124.9	L135 L136	6200005651	S.COL	ELJRE 8N2ZFA #617DB-1714=P3		T	31.8/68.2 21.2/84.4
L33	6200012520	S.COL	0.26-1.0-5TL 12N	Ť	98.5/106.3	L137	6130003000	S.COL	#617DB-1714=P3		Т	21.7/90.7
L34			MLF1608A 4R7K-T	Ţ	100.8/103.7	L138	6190001690	S.COL	ZBFS5105-PT-01		Ţ	119/121
L35 L36			ELJRE 22NGFA ELJRE 15NGFA	B	38.1/79.7 40.7/82.9	L139 L140			ZBFS5105-PT-01 ZBFS5105-PT-01		T	117.4/112 115.3/121
L37	6200005731	S.COL	ELJRE 39NGFA LQW18AN33NG00D	В	82.8/80.5	L141	6190001690	S.COL	ZBFS5105-PT-01		Т	117.4/115.3
L38	6200011580	S.COL	LQW18AN33NG00D LQW18AN33NG00D	T	26.1/130.4	L142			MLF1608D R82K-T MLF1608D R22K-T		B B	71.9/51.3
L39 L40				<del> </del>	101.1/117.4 31.7/134.2	L143 L144			NLV25T-R47J		Т	72.3/47.8 80.8/37.2
L41	6200011660	S.COL	LQW18ANR15G00D LQW18ANR15G00D	Т	104/113.5	L145	6200010310	S.COL	C2012C-27NG-A		Т	85.2/40.4
L42 L43			LQW18ANR10G00D LQW18ANR10G00D	T	30.8/137.1 105.7/117.9	L146 L147			C2012C-27NG-A ELJRE 68NGFA		T	86.5/37.7 79.4/49.4
L43	6200011770	S.COL	LQW18AN56NG00D	<del>'</del>	106.9/117.9	L147			ELJRE 39NGFA		†	84.4/65.5
L45	6200011580	S.COL	LQW18AN33NG00D	T	32.7/136.4	L149	6200005721	S.COL	ELJRE 33NGFA		Т	80.4/61.3
L46 L47	6200010060	S.COL	AS080647-56N LQW18ANR22G00D	B	88.7/128.9 24/99.6	L150 L151			ELJRE R10GFA ELJRE 10NGFA		T	87.7/47 81.9/63.8
L47 L48	6200005721	S.COL	ELJRE 33NGFA	Ϊ́Τ	55.4/97.6	L151			ELJRE 39NGFA		†	84.4/68.1
L49	6200005701	S.COL	ELJRE 22NGFA	T	61.9/97.6	L153			ELJRE 27NGFA		T	80.2/66.3
L50 L51			AS100340-10N LQW18AN24NG00D	B T	40.3/125 66.1/98.4	L155 L156			ELJRE 68NGFA ELJRE 68NGFA		T	76.2/68.2 78.4/68.4
L52			LQW18AN68NG00D	Ϊ́Τ	28.2/100.5	L157			ELJRE 56NGFA		Ť	88/67.1
L53	6200011590	S.COL	LQW18AN39NG00D	T	27.4/102.4	L158			ELJRE R22GFA		Ţ	76.2/64.9
L54 L55			LQW18AN68NG00D LQW18AN39NG00D	T	66.1/101.7 68/100.9	L159 L160			ELJRE 18NGFA MLF1608A 1R0K-T		T	45.6/68.9 90.2/59
L56	6200011390	S.COL	AS080647-56N	В	86.1/137.8	L161			MLF1608A 1R0K-T		Ť	42.7/58.2
L57	6200011770	S.COL	LQW18ANR10G00D	Т	36.3/104.1	L162	6200009220	S.COL	LQW18AN15NG00D		Т	32/56.2
L58 L59	6200011580	S.COL	LQW18AN33NG00D LQW18ANR10G00D	T	54.3/103.6 70.4/107.6	L163 L164			MLF1608E 100K-T LQW18ANR15G00D		T	93/15.2 38.4/135.2
L60	6200011770	S.COL	LQW18AN18NG00D	Ϊ́Τ	60.8/103.6	L165			LQW18AN613G00D		†	62.2/144.9
L61	6200010160	S.COL	AS080440-22N	В	40.8/130.4	L166			LQW18AN68NG00D		Т	89.3/121.3
L62 L63			FHW1210HC 1R0JGT	B T	83.4/149.7							
L63			LQW18AN18NG00D LQW18AN82NG00D	T	43.8/110.2 43.8/107.6	R3	7030010040	S.RES	ERJ2GEJ-JPW		В	97.8/102.8
L65	6200009070	S.COL	LQW18AN18NG00D	Т	73.3/115	R4	7030005040	S.RES	ERJ2GEJ 472 X (4.7 k)		В	102.7/98.5
L66			LQW18AN82NG00D	T	75.2/114.2	R5	7030005170				В	102.7/100.1
L67 L68	6200011580	S.COL	LQW18AN18NG00D LQW18AN33NG00D	T	62.1/110.2 55.6/110.2	R6 R7	7030005040 7030005170		ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 474 X (470 k)		T	5.2/116.2 5.2/117.8
L69	6200012960	S.COL	0.45-1.4-4TL 12.1N	Т	35.1/139.3	R8	7030005120	S.RES	ERJ2GEJ 102 X (1 k)		Т	86.4/75
L70	6200010420	S.COL	FHW1210HC 1R0JGT	В	45.5/133	R9	7030007290		ERJ2GEJ 222 X (2.2 k)		T	18.9/97.8
L71 L72			LQW31HN64NJ03L LQW18AN39NG00D	T	74.2/120.7 76.3/122.5	R10 R11	7030007290 7030007290	S.RES	ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 222 X (2.2 k)		T	73.3/96.3 11.9/100.2
L73	6200010160	S.COL	AS080440-22N	В	36.4/140.3	R12	7030005120	S.RES	ERJ2GEJ 102 X (1 k)		Т	46.5/79.4
L74	6200002390	S.COL	LQW31HN64NJ03L	T	50.6/113.7	R14 R15	7030005300		ERJ2GEJ 150 X (15)		T	11.1/102.6
L75 L76			LQW18AN39NG00D LQW18ANR15G00D	¦	53.6/116.3 88.5/119.4	R15	7030005240 7030005240		ERJ2GEJ 473 X (47 k) ERJ2GEJ 473 X (47 k)		T	103.6/101.6 18/128.5
L77	6200010160	S.COL	AS080440-22N	В	38.9/145.5	R17	7030005240	S.RES	ERJ2GEJ 473 X (47 k)		Т	85.9/76.2
L78	6200010910	S.COL	LQW18AN56NG00D	Т	93.7/124.4	R18	/030005000	S.RES	ERJ2GEJ 471 X (470)		Т	19.1/100.4
	-								I on the Ten side R: Mounter			

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

#### [MAIN UNIT] REF ORDER H/V DESCRIPTION M NO. LOCATION NO. 78.5/97.2 R19 7030005000 S.RES ERJ2GEJ 471 X (470) ERJ2GEJ 473 X (47 k) 7030005240 S.RES 46.1/78.2 R22 7030005120 S.RES ERJ2GEJ 102 X (1 k) B T 87.7/67.5 ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k) 17/103.4 R24 7030005090 SRES 78 6/100 5 ERJ2GEJ 101 X (100 k) ERJ2GEJ 104 X (100 k) 7030004980 12.2/106.7 R27 7030005090 S.RES 17/104.3 7030005080 S.RES ERJ2GEJ 823 X (82 k) 12.2/109.8 R28 ERJ2GEJ 471 X (470) ERJ2GEJ 104 X (100 k) ERJ2GEJ 471 X (470) R29 7030005000 S.RES T T 19.2/106.3 R30 7030005090 S.RES 79.2/101.2 R31 7030005000 S.RES 82.5/102.5 7030010090 S.RES ERJ2GEJ 180 X (18) ERJ2GEJ 470 X (47) 90.3/69 R35 S.RES 7030004970 17/110.9 7030005580 S.RES ERJ2GEJ 560 X (56) 92.1/69.9 R37 **R38** 7030004970 S.RES ERJ2GEJ 470 X (47 T 84.2/105.2 ERJ2GEJ 151 X (150) ERJ2GEJ 390 X (39) R39 7030007270 S.RES 10.6/116.5 7030009200 S.RES 11.1/117.7 R40 ERJ2GEJ 101 X (100) ERJ2GEJ 331 X (330) R41 R43 7030004980 S.RES S.RES 18.4/112.4 T B 43.9/66.4 7030007280 ERJ2GEJ 103 X (10 k) ERJ2GEJ 184 X (180 k) ERJ2GEJ 180 X (18) ERJ2GEJ 150 X (15) R44 7030005050 S.RES 46.1/121.5 7030008300 R45 S.RES 14.4/115.5 R46 7030010090 S.RES 91.2/69.9 R47 S.RES В 44.3/68.8 7030005300 R48 R49 7030005310 7030004980 S.RES S.RES ERJ2GEJ 124 X (120 k) ERJ2GEJ 101 X (100) 17.7/113.6 85.6/104.7 ERJ2GEJ 184 X (180 k) ERJ2GEJ 151 X (150) R50 7030008300 S.RES 88/105.8 S.RES 10.6/118.9 R51 7030007270 ERJ2GEJ-JPW ERJ2GEJ 224 X (220 k) R52 7030010040 S.RES 13.1/114.1 S.RES **R53** 7030005110 14/113.2 S.RES S.RES ERJ2GEJ 124 X (120 k) ERJ2GEJ 473 X (47 k) 86.8/105.4 87.8/107 R54 7030005310 R55 7030005240 ERJ2GEJ 473 X (47 k) ERJ2GEJ 151 X (150) ERJ2GEJ 331 X (330) ERJ2GEJ 473 X (47 k) ERJ2GEJ 390 X (39) 7030007270 7030007280 S.RES S.RES R56 В 89.4/70.7 R57 В 42.2/69.3 R58 7030005240 S.RES 14.4/114.6 89.1/71.9 S.RES B 7030009200 **R59** ERJ2GEJ 224 X (220 k) ERJ2GEJ-JPW 87.8/108.6 88.7/108.6 R60 7030005110 S.RES S.RES 7030010040 R61 ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 681 X (680) ERJ2GEJ 151 X (150) ERJ2GEJ 101 X (100) R63 7030005040 SRES 44 4/72 B B T S.RES 7030005010 42.2/70.2 R64 R66 7030007270 SRES 87.9/70.7 7030004980 S.RES 12.3/127.1 R67 R68 7030007270 7030005080 S.RES S.RES ERJ2GEJ 151 X (150) ERJ2GEJ 823 X (82 k) B T 44.6/73.7 12.3/126.2 R70 ERJ2GEJ 471 X (470) ERJ2GEJ 225 X (2.2 M) ERJ2GEJ 471 X (470) ERJ2GEJ 472 X (4.7 k) 19.7/113.7 10.7/126.2 R72 7030005000 SRES S.RES R73 7030007320 R74 7030005000 SRES 89 6/101 6 7030005040 S.RES 83.6/74.9 R75 R76 R77 7030005120 S.RES S.RES ERJ2GEJ 102 X (1 k) ERJ2GEJ 220 X (22) 83.6/74 41/76.3 B B T T T 7030007250 ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k) ERJ2GEJ 472 X (4.7 k) **R78** 7030005090 SRES 18.4/119.4 R79 R80 7030005090 S.RES 19.1/120.3 7030005040 SRES 11.6/129 ERJ2GEJ 104 X (100 k) 94.7/104.4 R81 7030005090 S.RES MCR10EZHJ 120 (121) ERJ2GEJ 104 X (100 k) 81/75.2 95.9/104.1 R82 7030000270 S.RES B T R83 7030005090 S.RES R85 7030005000 SRES ERJ2GEJ 471 X (470) 18 4/123 3 ERJ2GEJ 471 X (470) MCR10EZHJ 22 (220) 7030005000 S.RES 99.9/101 **R86 R88** 7030000180 S.RES В 36/77.8 7030005590 S.RES ERJ2GEJ 680 X (68) В 84.5/78.9 R89 ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 681 X (680) Ran 7030005040 SRES B B 38.4/78.7 40/79.7 R91 7030005010 B T T R92 7030000180 SRES MCR10EZHJ 22 (220) 34 3/77 8 ERJ2GEJ 102 X (1 k) ERJ2GEJ 102 X (1 k) MCR10EZHJ 22 (220) 7030005120 S.RES 102.6/107.4 R93 R94 7030005120 S.RES 18.3/127.6 R95 7030000180 S.RES 80.8/78.5 **R96** 7030005040 SRES ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 102 X (1 k) В 83 3/79 4 ВТ 84.5/80.5 7030005120 S.RES R97 **R98** 7030004980 SRES FRJ2GFJ 101 X (100) 19 7/124 5 MCR10EZHJ 22 (220) 79/78.5 R100 7030000180 S.RES B T T R101 7030010040 SRES FR.I2GF.I-.IPW 98 1/111 6 7030010040 S.RES ERJ2GEJ-JPW 98.1/117 R102 R103 7030010040 S.RES ERJ2GEJ-JPW 25/127.6 ERJ2GEJ 221 X (220) ERJ2GEJ 150 X (15) ERJ2GEJ 180 X (18) R104 7030004990 S.RES ВВ 39.1/84.3 R105 7030005300 SRES 85 7/83 9 38.6/83.1 R106 7030010090 S.RES B T T ERJ2GEJ 470 X (47) ERJ2GEJ 101 X (100) ERJ2GEJ 470 X (47) R107 7030004970 SRES 27.4/134.4 30.7/130.1 7030004980 S.RES R109 7030004970 S.RES 103/118 ERJ2GEJ 101 X (100) ERJ2GEJ 221 X (220) R110 7030004980 S.RES 98.5/114.4 R111 7030004990 SRES B 38 2/84 3

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ERJ2GEJ 473 X (47 k)

ERJ2GEJ 224 X (220 k) ERJ2GEJ 473 X (47 k)

ERJ2GEJ 224 X (220 k)

ERJ2GEJ 184 X (180 k)

ERJ2GEJ 184 X (180 k) ERJ2GEJ 184 X (180 k) ERJ2GEJ 124 X (120 k)

ERJ2GEJ 473 X (47 k) ERJ2GEJ 472 X (4.7 k)

ERJ2GEJ 103 X (10 k) ERJ2GEJ 151 X (150) ERJ2GEJ 182 X (1.8 k)

ERJ2GEJ 334 X (330 k) ERJ2GEJ 222 X (2.2 k)

ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 222 X (2.2 k)

ERJ2GEJ 222 X (2.2 k) ERJ2GEJ-JPW

ERJ2GEJ 331 X (330) ERJ2GEJ 221 X (220)

ERJ2GEJ-JPW

ERJ2GEJ 150 X (15) ERJ2GEJ 101 X (100)

[MAIN UNIT]  REF ORDER											
REF NO.	ORDER NO.	DESCRIPTION II									
R141	7030008400	S.RES	ERJ2GEJ 182 X (1.8 k)	ВТ	86.4/86.9						
R142	7030007280	S.RES	ERJ2GEJ 331 X (330)		61.2/99.3						
R143	7030005300	S.RES	ERJ2GEJ 150 X (15)	Т	60/100.5						
R144	7030007250	S.RES	ERJ2GEJ 220 X (22)	T	53.6/100.5						
R145	7030005090	S.RES	ERJ2GEJ 104 X (100 k)		30.9/103.5						
R147	7030007280	S.RES	ERJ2GEJ 331 X (330)	T	54.8/100.9						
R148	7030005060	S.RES	ERJ2GEJ 333 X (33 k)	B	37.7/104.7						
R149	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	Т	70.6/103.7						
R150	7030007280	S.RES	ERJ2GEJ 331 X (330)	T	61.2/100.9						
R152	7030004980	S.RES	ERJ2GEJ 101 X (100)	B	34.6/105						
R153	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	T	31.8/103.5						
R154	7030005600	S.RES	ERJ2GEJ 273 X (27 k)	B	74.5/134.2						
R155	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	T	70.6/104.6						
R156	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	В	56.5/101.5						
R157	7030005120	S.RES	ERJ2GEJ 102 X (1 k)		33.7/105						
R158	7030005080	S.RES	ERJ2GEJ 823 X (82 k)	B	35.1/107.9						
R159	7030005090	S.RES	ERJ2GEJ 104 X (100 k)		34.7/101.9						
R160 R161	7030005090 7030005090		ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k)	T	62.9/101.5 67.4/106.7						
R162	7030005110	S.RES	ERJ2GEJ 224 X (220 k)	В	34.6/106.6						
R163	7030005100	S.RES	ERJ2GEJ 154 X (150 k)	B	33.7/109.1						
R164	7030007350	S.RES	ERJ2GEJ 393 X (39 k)	T	56.9/104.8						
R165	7030004970	S.RES	ERJ2GEJ 470 X (47)	T	36.9/101.9						
R166	7030005220	S.RES	ERJ2GEJ 223 X (22 k)	B	39.6/111.6						
R167	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	39.1/110.3						
R168	7030007350	S.RES	ERJ2GEJ 393 X (39 k)	T	63.3/104.8						
R169	7030004970	S.RES	ERJ2GEJ 470 X (47)		72.5/106.7						
R170	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	56.4/103.6						
R171	7030004980	S.RES	ERJ2GEJ 101 X (100)		62.9/103.6						
R172	7030007270	S.RES	ERJ2GEJ 151 X (150)	Т	39.4/103.3						
R173	7030005240	S.RES	ERJ2GEJ 473 X (47 k)	T	39.7/107.7						
R174	7030007270	S.RES	ERJ2GEJ 151 X (150)	T	73/109.2						
R175	7030005310	S.RES	ERJ2GEJ 124 X (120 k)	T	40.5/104.8						
R176	7030007290	S.RES	ERJ2GEJ 222 X (2.2 k)	B	40.8/110.3						
R177	7030008300	S.RES	ERJ2GEJ 184 X (180 k) ERJ2GEJ 153 X (15 k)	T B	41.2/108.2						
R178 R179	7030007340 7030008300	S.RES S.RES	ERJ2GEJ 184 X (180 k)	Т	29.7/135.5 73.3/111.7						
R180	7030005110	S.RES	ERJ2GEJ 224 X (220 k)	T	37.5/107.2						
R181	7030005310	S.RES	ERJ2GEJ 124 X (120 k)		73.3/110.8						
R182 R183	7030007350 7030007320	S.RES S.RES	ERJ2GEJ 393 X (39 k) (2.2 M)	T	56/106.5 53.7/107.3						
R184	7030010040	S.RES	ERJ2GEJ-JPW `	Т	38.6/108.3						
R185 R186	7030010040	S.RES S.RES	ERJ2GEJ-JPW ERJ2GEJ 393 X (39 k)	T	69.7/111.8 62.4/106.5						
R187	7030007320	S.RES	ERJ2GEJ 225 X (2.2 M)	T	60.1/107.3						
R188	7030006070	S.RES	ERJ12YJ101U (100)	B	84.5/144.8						
R189	7030005110	S.RES	ERJ2GEJ 224 X (220 k)	Т	68.5/111.2						
R190	7030005240	S.RES	ERJ2GEJ 473 X (47 k)	T	70.9/111.4						
R191	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	T	65/109						
R192	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	T	58.5/109						
R193	7030005070	S.RES	ERJ2GEJ 683 X (68 k)	B	43/111.7						
R194	7030005110	S.RES	ERJ2GEJ 224 X (220 k)	B	44.9/107.8						
R195	7030007290		ERJ2GEJ 222 X (2.2 k)	T	61.6/111.4						
R196	7030007350	S.RES	ERJ2GEJ 393 X (39 k)	В	44.4/111.3						
R197	7030004980	S.RES	ERJ2GEJ 101 X (100)	B	45.7/106.2						
R198	7030005120	S.RES	ERJ2GEJ 102 X (1 k)	B	46.1/107.8						
R199 R200	7030007290 7030005090		ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 104 X (100 k)	T	52.9/110.7 46.8/108.1						
R201	7030005220	S.RES	ERJ2GEJ 223 X (22 k)	В	72.1/139.6						
R202	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	B	72.7/133.2						
R203	7030005090		ERJ2GEJ 104 X (100 k)	T	77/117						
R204	7030005530	S.RES	ERJ2GEJ 100 X (10)	T	38.2/137.9						
R205		S.RES	ERJ2GEJ 333 X (33 k)	B	41.7/104.7						
R206 R208	7030005090 7030005090	S.RES	ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k)	T	47.7/108.1 77/117.9						
R209	7030007290	S.RES	ERJ2GEJ 222 X (2.2 k)	В	74.1/133						
R210	7030006070	S.RES	ERJ12YJ101U (100)	B	45.5/127						
R211	7030005230	S.RES	ERJ2GEJ 334 X (330 k)	B	44.8/104.3						
R212	7030005120	S.RES	ERJ2GEJ 102 X (1 k)	T	55.9/117.3						
R213	7030005530	S.RES	ERJ2GEJ 100 X (10)		93.4/122.1						
R215 R216	7030005120 7030005530	S.RES	ERJ2GEJ 102 X (1 k) ERJ2GEJ 100 X (10)	Ť	103.1/106.1 106.4/123.2						
R217	7030005710	S.RES	ERJ2GEJ 121 X (120)	Т	72.4/122.5						
R218	7030004980	S.RES	ERJ2GEJ 101 X (100)	T	86.4/122.5						
R219	7030005120	S.RES	ERJ2GEJ 102 X (1 k)		103.5/126.1						
R220	7030005310	S.RES	ERJ2GEJ 124 X (120 k)	T	85.1/119						
R221	7030008300	S.RES	ERJ2GEJ 184 X (180 k)		86/120.6						
R222	7030010040	S.RES	ERJ2GEJ-JPW `	Ť	56.8/131.9						
R223	7030005710	S.RES	ERJ2GEJ 121 X (120)	Т	56.3/122						
R224	7030005120	S.RES	ERJ2GEJ 102 X (1 k)		109.1/130.4						
R225	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	T	63.3/113.2						
R226	7030005240	S.RES	ERJ2GEJ 473 X (47 k)		61.9/114.7						
R227	7030005240	S.RES	ERJ2GEJ 473 X (47 k)	Ť	85.2/122.1						
R228	7030005110		ERJ2GEJ 224 X (220 k)	T	84.3/122.1						
R229	7030004980	S.RES	ERJ2GEJ 101 X (100)	Т	53.7/135.8						
R230 R231	7030004980 7030005010		ERJ2GEJ 101 X (100) ERJ2GEJ 681 X (680)	T	59.4/135.3 81.6/122.1						
R232	7030005010	S.RES	ERJ2GEJ 681 X (680)	T	55.4/136.2						
R233	7030004980	S.RES	ERJ2GEJ 101 X (100)		80.8/118.1						
R234	7030005240	S.RES	ERJ2GEJ 473 X (47 k)	T T	56.9/138.9						
R235	7030005110	S.RES	ERJ2GEJ 224 X (220 k)	Т	54.8/137.5						
R236	7030010040	S.RES	ERJ2GEJ-JPW		78.4/123						
R237	7030005310	S.RES	ERJ2GEJ 124 X (120 k)	T	59/139.8						
R238	7030005310	S.RES	ERJ2GEJ 124 X (120 k)		59.5/137.9						
R239 R240	7030005040 7030005530	S.RES	ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 100 X (10)	Ť	65.9/114 66.8/142.7						
R241	7030005080	S.RES	ERJ2GEJ 823 X (82 k)	В	13.5/148.2						
R242 R243	7030005080 7030005240		ERJ2GEJ 823 X (82 k) ERJ2GEJ 473 X (47 k)	T	98.9/151.9 35.5/146.7						
R244	7030005040	S.RES	ERJ2GEJ 472 X (4.7 k)	T	32.4/144.7						
R245	7030005050	S.RES	ERJ2GEJ 103 X (10 k)		34.7/148.8						
R246 R247	7030005090 7030007320		ERJ2GEJ 104 X (100 k) ERJ2GEJ 225 X (2.2 M)	Ť	112/88.6 117/92.2						
R248	7030007320	S.RES	ERJ2GEJ 225 X (2.2 M)	Ť	109.6/93.6						

27.4/132.8 26.1/133

103/116.4

100.6/118.4

84.1/83.9 84.5/85.1

28.7/133.2

104 3/116 1

29.6/135.1

105.7/114.3

28.3/127.8

23.3/128.5

44.5/90.1

29 5/127 4

43.3/90.6

45.5/92.1

40.8/103.6

24.7/98.3

58/98.1

63.6/98.1

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## [MAIN UNIT]

	ORDER H/V				μм	REF ORDER				μл
REF NO.	NO. DESCRIPTION		M.	LOCATION	NO.	NO.	DESCRIPTION		H/V LOCATION	
R249 R251			ERJ2GE J 683 X (68 k)	ВТ	109/89.6	R362 R363	7030004980 7030005210	S.RES ERJ2GEJ 101 X (100)	T B	27.8/37.3 40.6/42.9
R251	7030005070 7030005240		ERJ2GEJ 683 X (68 k) ERJ2GEJ 473 X (47 k)	†	115.3/82.7 113.6/94.5	R363	7030005210		B	38.8/42.9
R253 R254	7030005090 7030005240		ERJ2GEJ 104 X (100 k) ERJ2GEJ 473 X (47 k)	T	114.4/83.6 106.2/95.9	R365 R366	7030007570 7030008300		T B	27.4/36.1 5.2/36.8
R255	7030007570	S.RES	ERJ2GEJ 122 X (1.2 k)	T	112.3/81.3	R367	7030010040	S.RES ERJ2GEJ-JPW	В	11.1/42.1
R256 R257	7030005290 7030005290		ERJ2GEJ 682 X (6.8 k) ERJ2GEJ 682 X (6.8 k)	T	116.1/92.2 108.7/93.6	R368 R369	7030008290 7030007280		T	58.7/42.8 27.4/34.3
R258	7030005220	S.RES	ERJ2GEJ 223 X (22 k)	T	111.6/93.3	R370	7030005090	S.RES ERJ2GEJ 104 X (100 k)	В	38.8/37.4
R259 R261	7030005220 7030005070		ERJ2GEJ 223 X (22 k) ERJ2GEJ 683 X (68 k)	T B	106.2/92.7 99.6/90.9	R372 R373	7030005080 7030005210		T B	8.5/59 41.6/43.9
R262 R263	7030005050 7030005090		ERJ2GEJ 103 X (10 k) ERJ2GEJ 104 X (100 k)	T B	111.9/86.8 102.3/92.5	R374 R375	7030005120 7030005000	S.RES ERJ2GEJ 102 X (1 k)	T B	7.3/39.4 8.5/65
R264	7030007570	S.RES	ERJ2GEJ 122 X (1.2 k)	В	99.6/90	R376	7030008300	S.RES ERJ2GEJ 184 X (180 k)	Т	7.3/40.3
R265 R266	7030005050 7030005040		ERJ2GEJ 103 X (10 k) ERJ2GEJ 472 X (4.7 k)	T	111.9/87.7 116.9/97.4	R377 R378	7030007570 7030010040		B	41.2/45.1 29/36.1
R267	7030007340	S.RES	ERJ2GEJ 153 X (15 k)	T	110.7/87.2	R379	7030004970	S.RES ERJ2GEJ 470 X (47)	В	62.4/68.3
R268 R269	7030005040 7030005050		ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 103 X (10 k)	T B	108.7/98.1 106.4/90.4	R380 R381	7030005000 7030005000		B B	61.5/66.6 63.6/64.4
R270 R271	7030005050 7030007310		ERJ2GEJ 103 X (10 k) ERJ2GEJ 155 X (1.5 M)	B	107.6/90.4 112.7/94.5	R382 R383	7030007320 7030005040		T	36.3/38.4 8.2/60.4
R272	7030007280	S.RES	ERJ2GEJ 331 X (330)	T	115.8/96.3	R384	7030005090	S.RES ERJ2GEJ 104 X (100 k)	В	65.6/65.9
R273 R274	7030007310 7030007280		ERJ2GEJ 155 X (1.5 M) ERJ2GEJ 331 X (330)	T	105.3/95.9 107.8/98.1	R385 R386	7030005230 7030007300		T B	5.4/41.9 37.3/43.3
R275	7030007340	S.RES	ERJ2GEJ 153 X (15 k) ERJ2GEJ 683 X (68 k)	B	105.5/90	R388	7030005050	S.RES ERJ2GEJ 103 X (10 k)	T	9.4/59.9
R276 R277	7030005070 7030007350	S.RES	ERJ2GEJ 393 X (39 k)	Т	111.9/85 111.6/92.4	R389 R390	7030010040 7030008400	S.RES ERJ2GEJ 182 X (1.8 k)	Т	8.5/66.6 29.9/37
R278 R279	7030005070 7030005090		ERJ2GEJ 683 X (68 k) ERJ2GEJ 104 X (100 k)	T B	110.3/85 109.6/88.7	R394 R395	7030008270 7030005050		T B	37.2/37.5 63.8/67.9
R280	7030007350	S.RES	ERJ2GEJ 393 X (39 k) <sup>'</sup>	Т	105.3/94.2	R396	7030005000	S.RES ERJ2GEJ 471 X (470)	Т	5.6/39.4
R281 R282	7030005070 7030005050		ERJ2GEJ 683 X (68 k) ERJ2GEJ 103 X (10 k)	B	103.7/90 108/88.7	R397 R398	7030007290 7030005050		T	10.7/60.2 16.5/69.2
R283 R284	7030005220 7030005220		ERJ2GEJ 223 X (22 k) ERJ2GEJ 223 X (22 k)	T	111.6/91.5 105.3/91.8	R399 R400	7030007280 7030005070		B	67.2/66.8 9.4/62.2
R285	7030005070	S.RES	ERJ2GEJ 683 X (68 k)	T	107.9/85	R402	7030007340	S.RES ERJ2GEJ 153 X (15 k)	Т	6.3/50.3
R286 R287	7030005070 7030005700		ERJ2GEJ 683 X (68 k) ERJ2GEJ 274 X (270 k)	B	103.7/88.4 21.2/46.8	R403 R404	7030005820 7030005820		T	36/41.1 42.9/36.3
R288	7030008010	S.RES	ERJ2GEJ 123 X (12 k)	T	110.4/91	R405	7030005820	S.RES RR0510P-103-D (10 k)	Т	36/42.7
R290 R292	7030008010 7030010040		ERJ2GEJ 123 X (12 k) ERJ2GEJ-JPW	T B	103.2/92 20/44.7	R406 R407	7030008010 7030008010		T	9.4/55.4 9.4/47.9
R293 R294	7030010040 7030005070		ERJ2GEJ-JPW ERJ2GEJ 683 X (68 k)	B	59.9/42.1 102.5/87.4	R408 R409	7030004970 7030009270		T	37/43.8 40.1/39.5
R295	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	В	104.1/86.3	R411	7030005820	S.RES RR0510P-103-D (10 k)	T	43.2/38.4
R296 R298	7030005050 7030008290		ERJ2GEJ 103 X (10 k) ERJ2GEJ 183 X (18 k)	B	102.5/86.5 16.5/40.5	R412 R413	7030005750 7030008280		T	44.3/40 46.3/34.9
R299 R301	7030005050 7030004980		ERJ2GEJ 103 X (10 k) ERJ2GEJ 101 X (100)	B	21.2/45.9 55/40.9	R414 R415	7030007340 7030007300		T	13.9/63.5 7/65.5
R302	7030010040	S.RES	ERJ2GEJ-JPW `	В	51.8/34	R416	7030010040	S.RES ERJ2GEJ-JPW	В	73.6/74.5
R303 R304	7030008290 7030007060		ERJ2GEJ 183 X (18 k) ERJ2GEJ 684X (680 k)	B	55.8/37 27.4/46.9	R417 R418	7030008010 7030008010		T	16.7/59.5 17/51.5
R305 R306	7030005050 7030005030		ERJ2GEJ 103 X (10 k) ERJ2GEJ 152 X (1.5 k)	T B	57.5/74.1 54.9/37.9	R419 R420	7030005120 7030005050		T	12/61 40/43.5
R307	7030005080	S.RES	ERJ2GEJ 823 X (82 k)	T	51.5/60.7	R421	7030008400	S.RES ERJ2GEJ 182 X (1.8 k)	Т	41.5/41.6
R308 R309	7030005000 7030005050		ERJ2GEJ 471 X (470) ERJ2GEJ 103 X (10 k)	B	54/65.9 29.7/50.9	R422 R423	7030007280 7030005120		T	16.1/68 40.3/46.4
R310 R311	7030005170 7030005220	S.RES	ERJ2GEJ 474 X (470 k) ERJ2GEJ 223 X (22 k)	B B	52.3/38.6 52.8/37.4	R426 R427	7030005220 7030009290	S.RES ERJ2GEJ 223 X (22 k)	T	44.3/42.4 45.9/40.9
R312	7030007250	S.RES	ERJ2GEJ 220 X (22)	T	29.5/45.6	R428	7030010040	S.RES ERJ2GEJ-JPW `	Т	37.8/60.7
R313 R314			ERJ2GEJ 103 X (10 k) ERJ2GEJ 472 X (4.7 k)	B	26/40.9 53.6/61.2	R429 R430		S.RES ERJ2GEJ 470 X (47) S.RES ERJ2GEJ 471 X (470)	B	15.8/67.5 16.7/66.6
R315 R316			ERJ2GEJ-JPW ERJ2GEJ 153 X (15 k)	B T	54/67.5	R431 R432	7030005000 7030005590	S.RES ERJ2GEJ 471 X (470)	B	18/63.5 44.6/45.6
R317	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	T	55.5/51.2 54.8/60.7	R433	7030005040	S.RES ERJ2GEJ 472 X (4.7 k)	Т	45.3/47.3
R318 R319	7030005220 7030008300		ERJ2GEJ 223 X (22 k) ERJ2GEJ 184 X (180 k)	B	30.2/47.4 51.9/37.4	R434 R436	7030005090 7030010040	S.RES ERJ2GEJ 104 X (100 k) S.RES ERJ2GEJ-JPW	B	20.4/65.5 37.2/62.3
R320	7030010040	S.RES	ERJ2GEJ-JPW `	В	26.7/43.7	R438	7030005050	S.RES ERJ2GEJ 103 X (10 k)	В	19/68.9
R321 R322	7030007290 7030008010	S.RES	ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 123 X (12 k)	T	56.1/61 54.7/56.3	R439 R440	7030004990 7030004970	S.RES ERJ2GEJ 221 X (220) S.RES ERJ2GEJ 470 X (47)	B	21.7/65.9 63.1/88.3
R323 R324	7030008010 7030005070		ERJ2GEJ 123 X (12 k) ERJ2GEJ 683 X (68 k)	T	54.7/48.8 54.8/63.9	R441 R443	7030010040	S.RES ERJ2GEJ-JPW	T	34.1/56.2 68.8/81.5
R325	7030007320	S.RES	ERJ2GEJ 225 X (2.2 M)	T	31.6/47.4	R444	7030010040 7030004990	S.RES ERJ2GEJ 221 X (220)	Т	67.5/86.3
R327 R328	7030005120 7030008300	S.RES	ERJ2GEJ 102 X (1 k) ERJ2GEJ 184 X (180 k)	T	54.5/40.3 54.5/41.2	R445 R446	7030010040 7030010040 7030004990	S.RES ERJ2GEJ-JPW S.RES ERJ2GEJ-JPW	T	44/66.7 44.9/65.8
R329 R330	7030010040 7030008010		ERJ2GEJ-JPW ERJ2GEJ 123 X (12 k)	B	100.4/21.7 62.2/59	R447 R448	7030004990 7030005040	S.RES ERJ2GEJ 221 X (220) S.RES ERJ2GEJ 472 X (4.7 k)	T	68.6/87.4 46/56.1
R331	7030008010	S.RES	ERJ2GEJ 123 X (12 k)	T	62.5/51.1	R449	7030005040 7030007290	S.RES ERJ2GEJ 472 X (4.7 k)	Т	36.3/55.6
R332 R333	7030005230 7030005050	S.RES S.RES	ERJ2GEJ 334 X (330 k) ERJ2GEJ 103 X (10 k)	T B	51.9/42.8 23.1/49.7	R450 R452	7030010040	S.RES ERJ2GEJ-JPW	T B	36.8/68.3 28.7/73.7
R334 R335	7030007340 7030005000		ERJ2GEJ 153 X (15 k) ERJ2GEJ 471 X (470)	T	59.3/64.3 52.9/40.3	R453 R455	7030005090 7030010040	S.RES ERJ2GEJ 104 X (100 k) S.RES ERJ2GEJ-JPW	T	67.9/82.4 40.2/60
R336	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	22.5/48.8	R457	7030005530	S.RES ERJ2GEJ 100 X (10)	Т	30.7/59.9
R337 R338	7030005600 7030005050		ERJ2GEJ 273 X (27 k) ERJ2GEJ 103 X (10 k)	T B	24/43.5 22.7/47.9	R460 R461	7030010040 7030005040	S.RES ERJ2GEJ-JPW S.RES ERJ2GEJ 472 X (4.7 k)	T	39.4/61.7 52.2/96
R339	7030007300	S.RES	ERJ2GEJ 332 X (3.3 k)	В	84.3/46.1	R462	7030004970	S.RES ERJ2GEJ 470 X (47)	T	13.6/88.6
R340 R341	7030008290 7030005120	S.RES	ERJ2GEJ 183 X (18 k) ERJ2GEJ 102 X (1 k)	Ţ	22.1/41.6 57.3/61.9	R463 R464	7030010040 7030004990	S.RES ERJ2GEJ-JPW S.RES ERJ2GEJ 221 X (220)	Т	19.3/81.7 18/86.5
R342 R343	7030007280 7030005040		ERJ2GEJ 331 X (330) ERJ2GEJ 472 X (4.7 k)	T	59.8/68.7 23.3/41.4	R465 R466	7030005040	S.RES ERJ2GEJ 472 X (4.7 k)	T	31.6/70.6 39.9/69.1
R344	7030005050 7030007300	S.RES	ERJ2GEJ 103 X (10 k)	Ť	21.6/39.5	R467 R469	7030005120 7030004990 7030005090	S.RES ERJ2GEJ 221 X (220)	Ť	19.2/87.7
R345 R346	7030007300	S.RES	ERJ2GEJ 332 X (3.3 k)	T	55.1/66.8 53/65.6	R470	7030005090 7030005040 7030005040	S.RES ERJ2GEJ 104 X (100 k) S.RES ERJ2GEJ 472 X (4.7 k)	Т	22.9/87.4 39.9/70.7
R347 R348	7030004980 7030005000			T	26.8/42.5 36.5/47.2	R471 R472	7030005040 7030005310	S.RES ERJ2GEJ 472 X (4.7 k) S.RES ERJ2GEJ 124 X (120 k)	T	11.5/96.6 7.1/122.8
R349	7030005220	S.RES	ERJ2GEJ 223 X (22 k)	T	37.7/47.5	R473	7030005310 7030005120 7030005220	S.RES ERJ2GEJ 102 X (1 k)	Т	122/23.9
R350 R351	7030005050 7030004980	S.RES		T B	38.7/48.9 8.6/40.3	R475 R476	7030005040	S.RES ERJ2GEJ 472 X (4.7 k)	B	121.6/91.3 121.4/76.6
R352 R353	7030005030 7030008290	S.RES	ERJ2GEJ 152 X (1.5 k) ERJ2GEJ 183 X (18 k)	B B	7.6/38 8.8/38.4	R477 R478	7030005240 7030005220	S.RES ERJ2GEJ 473 X (47 k) S.RES ERJ2GEJ 223 X (22 k)	B B	100.4/130.4 121.6/92.2
R354	7030005240	S.RES	ERJ2GEJ 473 X (47 k)	В	44.5/39.1	R479	7030005120	S.RES ERJ2GEJ 102 X (1 k)	Т	117/77.1
R355 R356	7030010040 7030007280	S.RES	ERJ2GEJ-JPW ERJ2GEJ 331 X (330)	T	26.9/37.3 41.6/49.3	R480 R481	7030005240 7030005160	S.RES ERJ2GEJ 473 X (47 k) S.RES ERJ2GEJ 105 X (1 M)	B	115.9/86.2 124.8/81.4
R358 R359	7030005170 7030005220	S.RES	ERJ2GEJ 474 X (470 k) ERJ2GEJ 223 X (22 k)	B B	6/38 7.9/36.8	R482 R483	7030005050	S.RES ERJ2GEJ 103 X (10 k)	T	116.8/86.2 128/20.6
R360	7030005220		ERJ2GEJ 103 X (10 k)	В	40/36.6	R484	703000020 7030005090	S.RES ERJ2GEJ 104 X (100 k)	Τ̈́	118.3/77.1
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M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

R613

R614

R615

R617

R618

R619

R620

R621

R624

7030005600

7030007320

7030007320

7030005050

7030007300

7030005240

7030005000

7030005050

7030005160

7030007340

7030004980

SRES

S.RES

S.RES

S.RES

S.RES

S.RES

S.RES

S.RES

S.RES

SRES

S.RES

ERJ2GEJ 275 X (2.7 K) ERJ2GEJ 225 X (2.2 M) ERJ2GEJ 225 X (2.2 M)

ERJ2GEJ 103 X (10 k) ERJ2GEJ 332 X (3.3 k)

ERJ2GEJ 473 X (47 k) ERJ2GEJ 471 X (470)

ERJ2GEJ 103 X (10 k) ERJ2GEJ 105 X (1 M)

ERJ2GEJ 153 X (15 k) ERJ2GEJ 101 X (100)

#### REF ORDER H/V DESCRIPTION M. NO. LOCATION R485 98.7/120.5 7030000400 S.RES MCR10EZHJ 1.5 k ERJ2GEJ 101 X (100) ERJ2GEJ 101 X (100) ERJ2GEJ 103 X (10 k) 7030004980 S.RES 110.1/63.1 R489 7030004980 S.RES 126.3/74 7030005050 ERJ2GEJ 101 X (100) R493 7030004980 SRES 128 7/74 3 ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 102 X (1 k) 8.4/33.2 R494 7030005040 B B R495 7030005120 S.RES 6.8/33.2 123.6/23.9 R497 7030005040 S.RES ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 471 X (470) ERJ2GEJ 472 X (4.7 k) R498 7030005040 S.RES В 101.6/102.2 R499 7030005000 S.RES 103.4/101.3 В R500 7030005040 S.RES 101.8/104.5 R501 7030005000 S.RES ERJ2GEJ 471 X (470) ERJ2GEJ 101 X (100) 102.2/105.7 7030004980 S.RES R504 125.7/24.8 R506 7030005050 S.RES ERJ2GEJ 103 X (10 k) 125.2/23.9 ERJ2GEJ 101 X (100) R508 7030004980 S.RES В 128.7/65.7 NTCG10 4LH 473JT ERJ2GEJ 393 X (39 k) R509 7510001770 S.TMR 113.6/89.2 7030007350 S.RES R510 В 112.4/89.6 ERJ2GEJ 101 X (100) ERJ2GEJ 101 X (100) 7030004980 S.RES S.RES R511 B B 116.3/88.6 R512 7030004980 117.2/88.8 R514 7030005220 S.RES ERJ2GEJ 223 X (22 k В 7.6/29.7 S.RES ERJ2GEJ 103 X (10 k) R515 7030005050 B B 6/29.7 R516 7410001230 S.ARY EXB28V101JX 126.9/65.8 ERJ2GEJ 222 X (2.2 k) S.RES В 9.6/31.4 R517 7030007290 S.RES S.RES ERJ2GEJ 101 X (100) ERJ2GEJ 104 X (100 k) 106.5/83.1 8.4/31.9 R518 7030004980 B B R519 7030005090 R520 7410001230 S.ARY EXB28V101JX 108.5/85.2 ERA3YKD 334V (330 k) ERA3YKD 124V (120 k) ERA3YED 123V (12 k) 7030005521 S.RES R521 116.9/68.4 R522 7030005501 S.RES 118.1/67.5 7030005691 R523 S.RES 118.8/69.6 S.RES S.ARY ERJ2GEJ 103 X (10 k) EXB28V101JX 117.8/65.4 110.6/87.2 R524 7030005050 В R525 7410001230 S.RES S.RES ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 102 X (1 k) 15.7/28.6 13.2/27.4 R527 7030005040 7030005120 R529 R530 7030005170 S.RES ERJ2GEJ 474 X (470 k) ERJ2GEJ 333 X (33 k) 114.1/65.9 S.RES R532 7030005060 13.8/30.2 ERJ2GEJ 683 X (68 k) ERJ2GEJ 101 X (100) R533 7030005070 S.RES 13.8/28.6 R534 7030004980 S.RES 107.9/65.5 ERJ2GEJ 101 X (100) ERJ2GEJ 101 X (100) ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 101 X (100) 112/63 4 R536 7030004980 SRES S.RES 7030004980 R537 12.9/30.5 R538 7030005040 SRES 16.7/28.6 R539 7030004980 S.RES В 124.2/65.3 R540 7030004980 S.RES ERJ2GEJ 101 X (100) ERJ2GEJ 273 X (27 k) B T 125.1/66 17.6/28.6 R541 S.RES 7030005600 R545 7030007340 SRES FBJ2GFJ 153 X (15 k) 19 9/28 6 7030007040 ERJ2GEJ 223 X (22 k) R547 S.RES 25.5/25.9 R549 7030010040 SRES ERJ2GEJ-JPW 24 3/27 7 ERJ2GEJ 122 X (1.2 k) 22.5/22.8 R550 7030007570 S.RES R552 7030004980 S.RES S.RES ERJ2GEJ 101 X (100) ERJ2GEJ 101 X (100) B T 98.8/75.3 119.4/66.6 R553 7030004980 R554 7410001230 S.ARY FXB28V101.IX В 120 6/61 1 S.ARY S.RES EXB28V101JX R556 7410001230 В 102.8/66.7 R557 7030004980 EBJ2GEJ 101 X (100) 107.9/67.5 R558 7410001230 S.ARY EXB28V101JX 99/70 S.ARY S.RES 110.6/59 24.3/26.1 R559 7410001230 EXB28V101JX B T R560 7030008290 ERJ2GEJ 183 X (18 k) R561 7410001230 S.ARY FXB28V101.IX В 105.8/62.5 R562 7030005170 S.RES ERJ2GEJ 474 X (470 k) 19/27 R563 7410001230 S.ARY EXB28V101JX В 101/68.4 R564 7410001230 S.ARY EXB28V101JX В 104.6/64.9 ERJ2GEJ 822 X (8.2 k) ERJ2GEJ 472 X (4.7 k) R566 7030005210 SRES 21.3/23.7 R567 110.1/79.3 7030005040 ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k) R568 7030005090 SRES 110 5/78 1 R569 7030005090 S.RES 64.8/5.6 R570 7030005090 S.RES 30.6/28 7030005240 S.RES ERJ2GEJ 473 X (47 k) 43.7/12.6 R571 R572 7030005090 SRES ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k) 112 2/98 1 7030005090 S.RES 110.4/98.1 R573 ERJ2GEJ 822 X (8.2 k) R574 7030005210 SRES B 27 3/23 9 ERJ2GEJ 392 X (3.9 k) В R575 7030008410 S.RES 28.5/23.5 ERJ2GEJ 103 X (10 k) ERJ2GEJ 182 X (1.8 k) **B577** 7030005050 SRES В 36 5/20 37.3/24.1 R578 7030008400 R579 7030010040 S.RES ERJ2GEJ-JPW B T 66.3/12.7 R581 7030005090 S.RES ERJ2GEJ 104 X (100 k) 58.3/7.7 R582 7030007320 SRES ERJ2GEJ 225 X (2.2 M) T T 36 1/25 7 ERJ2GEJ 225 X (2.2 M) 36.1/24.1 R583 7030007320 S.RES R584 7030007320 SRES ERJ2GEJ 225 X (2.2 M) 37/25 7 ERJ2GEJ 225 X (2.2 M) 37/24.1 ERJ2GEJ 223 X (22 k) R586 7030005220 S.RES Т 113.1/98.1 ERJ2GEJ 223 X (22 k) ERJ2GEJ 822 X (8.2 k) 7030005220 S.RES 111.3/98.1 R587 **R588** 7030005210 SRES 50 6/10 4 S.RES ERJ2GEJ 105 X (1 M) R589 7030005160 33.3/24 R590 7030007320 SRES ERJ2GEJ 225 X (2.2 M) ERJ2GEJ 225 X (2.2 M) 65 7/5 6 R591 7030007320 S.RES 74.6/4.4 ERJ2GEJ 104 X (100 k) R592 7030005090 S.RES Т 114.3/101.2 ERJ2GEJ 681 X (680) ERJ2GEJ 472 X (4.7 k) S.RES 115.9/103.1 R593 7030005010 В R594 7030005040 S.RES 59/9.6 ERJ2GEJ 225 X (2.2 M) ERJ2GEJ 225 X (2.2 M) ERJ2GEJ 103 X (10 k) R598 7030007320 S.RES 65/8 R600 7030007320 SRES B T 40/14 3 7030005050 S.RES 108.5/101.8 R608 ERJ2GEJ 273 X (27 k) R609 7030005600 S.RES 105.3/104.2 ERJ2GEJ 103 X (10 k) ERJ2GEJ 273 X (27 k) 106.7/101.8 S.RES R610 R611 7030005600 S.RES 105.8/101.8 ERJ2GEJ 103 X (10 k) ERJ2GEJ 273 X (27 k) 7030005050 S.RES 107.6/101.8 R612

[MAIN UNIT]										
REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION					
R625 R626	7030005240 7030005240	S.RES S.RES	ERJ2GEJ 473 X (47 k) ERJ2GEJ 473 X (47 k)	T T	125.9/114.3 120.9/108.1					
R627	7030008410	S.RES	ERJ2GEJ 392 X (3.9 k)	Т	112.5/77.7					
R628 R630	7030005090 7030005230	S.RES S.RES	ERJ2GEJ 104 X (100 k) ERJ2GEJ 334 X (330 k)	T	70.4/17.9 127.9/107.5					
R631	7030005230	S.RES	ERJ2GEJ 334 X (330 k)	Т	120.9/106.3					
R632 R635	7030007350	S.RES S.RES	ERJ2GEJ 393 X (39 k) ERJ2GEJ 334 X (330 k)	T B	114/77.5 122.6/104.9					
R637	7030007340	S.RES	ERJ2GEJ 153 X (15 k)	В	70.4/16.1					
R638 R639	7030005050 7030005120	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 102 X (1 k)	T T	127.5/113.4 122.5/107.2					
R640 R641	7030009290 7030005090	S.RES S.RES	ERJ2GEJ 562 X (5.6 k) ERJ2GEJ 104 X (100 k)	B T	59.7/17.7 128.3/108.7					
R642	7030005090	S.RES	ERJ2GEJ 104 X (100 k)	Т	123.2/111.8					
R643 R644	7030007340 7030005050	S.RES S.RES	ERJ2GEJ 153 X (15 k) ERJ2GEJ 103 X (10 k)	B T	70.4/17 114.4/76.3					
R645	7030007350	S.RES	ERJ2GEJ 393 X (39 k)	Т	114.9/77.5					
R647 R649	7030005090 7030005210	S.RES S.RES	ERJ2GEJ 104 X (100 k) ERJ2GEJ 822 X (8.2 k)	B T	127.6/109.2 125/107.2					
R653	7030009280	S.RES	ERJ2GEJ 391 X	T T	128.7/103.9					
R658 R659	7030009280 7030000100	S.RES S.RES	ERJ2GEJ 391 X MCR10EZHJ 4.7 (4R7)	†	128.7/116.1 124.8/142.5					
R660	7030005090	S.RES S.RES	ERJ2GEJ 104 X (100 k) MCR10EZHJ 4.7 (4R7)	T T	61.4/17.2					
R661 R663	7030000100 7030005230	S.RES	ERJ2GEJ 334 X (330 k)	Т	104.7/145.9 125.2/106.3					
R664 R665	7030005090 7030008010	S.RES S.RES	ERJ2GEJ 104 X (100 k) ERJ2GEJ 123 X (12 k)	T	61.4/18.8 122.6/144.3					
R677	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	75.9/47.6					
R678 R679	7030005050 7030005700	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 274 X (270 k)	B B	65.8/45.9 65.8/46.8					
R680	7030010040	S.RES	ERJ2GEJ-JPW ` ´	В	64.6/44.8					
R681 R682	7030005530 7030007060	S.RES S.RES	ERJ2GEJ 100 X (10) ERJ2GEJ 684X (680 k)	B B	73.5/46 71.8/46.7					
R683 R684	7030005050	S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 223 X (22 k)	B B	70.6/40.9					
R685	7030005220 7030007250	S.RES S.RES	ERJ2GEJ 223 X (22 k) ERJ2GEJ 220 X (22)	T	75/47.6 75.1/45.7					
R686 R688	7030005050 7030005050	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k)	B B	68.1/49.8 67.4/48.8					
R690	7030005050	S.RES	ERJ2GEJ 103 X (10 k)	В	67.4/47.9					
R694 R695	7030005030 7030004980	S.RES S.RES	ERJ2GEJ 152 X (1.5 k) ERJ2GEJ 101 X (100)	T	72/37.5 72.8/36.6					
R696	7030007570	S.RES	ERJ2GEJ 122 X (1.2 k)	Т	71.5/36.3					
R697 R698	7030007570	S.RES S.RES	ERJ2GEJ 122 X (1.2 k) ERJ2GEJ 122 X (1.2 k)	T T	74.6/35.1 72.4/34.7					
R699 R700	7030005120 7030005090	S.RES S.RES	ERJ2GEJ 102 X (1 k) (1 k) (1 k) (1 k)	T T	80.6/44.6 79.3/41.8					
R701	7030003090	S.RES	ERJ2GEJ 104 X (100 K) ERJ2GEJ 225 X (2.2 M)	Т	82.2/44.6					
R702 R703	7030005090 7030005240	S.RES S.RES	ERJ2GEJ 104 X (100 k) ERJ2GEJ 473 X (47 k)	T	81.8/43.4 85.7/35					
R704	7030005120	S.RES	ERJ2GEJ 102 X (1 k)	Т	83.6/35.8					
R705 R706	7030005040 7030009530	S.RES S.RES	ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 270 X (27)	T	84/38.5 84.9/58.4					
R707	7030007320	S.RES	ERJ2GEJ 225 X (2.2 M)	Т	75.2/49.2					
R708 R709	7030005050 7030010040	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ-JPW	T T	88.1/39.3 85.3/61.3					
R710 R711	7030007260 7030009530		ERJ2GEJ 330 X (33) ERJ2GEJ 270 X (27)	T T	84.9/57.5					
R712	7030004970	S.RES	ERJ2GEJ 270 X (27) ERJ2GEJ 470 X (47)	Т	83.3/58.4 86.9/44.2					
R713 R714	7030005050 7030009270		ERJ2GEJ 103 X (10 k) ERJ2GEJ 821 X (820)	T	86.9/42.6 90.3/39.1					
R716	7030010040	S.RES	ERJ2GEJ-JPW `	Т	84.5/62.9					
R717 R718	7030005710	S.RES S.RES	ERJ2GEJ 121 X (120) ERJ2GEJ 102 X (1 k)	T	90.3/42.3 83.6/57.2					
R719	7030005120	S.RES	ERJ2GEJ 102 X (1 k)	T T	83.7/47.6					
R720 R721	7030005040 7030004990		ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 221 X (220)	Т	86.3/63.8 82.3/47.6					
R722 R723	7030007290 7030005050	S.RES S.RES	ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 103 X (10 k)	T	82.5/60.3 88.7/45.3					
R724	7030008400	S.RES	ERJ2GEJ 182 X (1.8 k)	Т	90.3/45.3					
R725 R726	7030005050 7030005220	S.RES S.RES	ERJ2GEJ 103 X (10 k) ERJ2GEJ 223 X (22 k)	T	85.3/49.2 84.9/48					
R727 R728	7030005120 7030005010	S.RES S.RES	ERJ2GEJ 102 X (1 k) ERJ2GEJ 681 X (680)	T T	88.7/44.4 87.7/49.5					
R733	7030005040	S.RES	ERJ2GEJ 472 X (4.7 k)	Т	84.6/70.7					
R734 R737	7030007290 7030010040	S.RES S.RES	ERJ2GEJ 222 X (2.2 k) ERJ2GEJ-JPW	T	80.7/68.3 88.6/61.3					
R738	7030005040	S.RES	ERJ2GEJ 472 X (4.7 k)	Т	78.8/70.8					
R739 R741	7030007290 7030005120	S.RES	ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 102 X (1 k)	T T	89.5/61.3 86.2/69.8					
R742	7030007290	S.RES	ERJ2GEJ 222 X (2.2 k)	Ť	75.7/63.8					
R743 R744	7030005060 7030005590	S.RES	ERJ2GEJ 333 X (33 k) ERJ2GEJ 680 X (68)	Т	75.9/61.4 75.3/60.2					
R745 R747	7030007290 7030005040		ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 472 X (4.7 k)	T T	75.7/69.5 45.3/60.4					
R748	7030005040	S.RES	ERJ2GEJ 472 X (4.7 k)	Т	41.6/47.7					
R750 R752	7030005040 7030005040		ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 472 X (4.7 k)	T T	36.6/58.7 45.3/62					
R754	7030007250	S.RES	ERJ2GEJ 220 X (22)	Ť	14/111.5 83.8/108					
R755 R756	7030007250 7030010040	S.RES	ERJ2GEJ 220 X (22) ERJ2GEJ-JPW	Т	68.6/108.1					
R757 R758	7030010040 7030004980	S.RES S.RES	ERJ2GEJ-JPW ERJ2GEJ 101 X (100)	T T	36/105.2 90.9/11.1					
R759	7030004980	S.RES	ERJ2GEJ 101 X (100)	Т	90.2/6.5					
R762 R763	7030005110 7030005220	S.RES S.RES	ERJ2GEJ 224 X (220 k) ERJ2GEJ 223 X (22 k)	T	60.5/19.8 60.2/16.1					
R764	7030005070	S.RES	ERJ2GEJ 683 X (68 k)	Т	60.2/15.2					
R765 R766	7030005110 7030005110	S.RES S.RES	ERJ2GEJ 224 X (220 k) ERJ2GEJ 224 X (220 k)	T T	60.2/14.3 70.1/15.8					
R767 R768	7030005110 7030005110		ERJ2GEJ 224 X (220 k) ERJ2GEJ 224 X (220 k)	T	64.4/21.3 59.3/19.3					
R769	7030005230	S.RES	ERJ2GEJ 334 X (330 k)	Т	60.1/18.4					
R770 R771	7030005110 7030005110	S.RES S.RES	ERJ2GEJ 224 X (220 k) ERJ2GEJ 224 X (220 k)	T T	114.4/69.1 70/20					
R772	7030005000	S.RES	ERJ2GEJ 471 X (470)	Ť	73.5/19.7					

105 7/103

65/6.4

99.4/32.7

65/9.6 120.1/41.7

115.4/40.4

116.6/40.9

121.3/41.4

116.7/44.4

118.5/99.4

70.2/14.7

Т

В

Т

Т

ВВ

#### REF ORDER H/V DESCRIPTION M NO. LOCATION 73.5/20.6 R773 7030009140 S.RES ERJ2GEJ 272 X (2.7 k) 72.5/18.8 7030007340 S.RES ERJ2GEJ 153 X (15 k) R775 7030005170 S.RES EBJ2GEJ 474 X (470 k) 72.3/20 103.4/36.7 FB.I2GF.I 224 X (220 k) **R778** 7030005110 SRES B 105/36 7 ERJ2GEJ 224 X (220 k) ERJ2GEJ 104 X (100 k) R779 R780 7030005110 ВВ 104.8/28.2 7030005090 S.RES 104.8/27.3 7030005050 S.RES ERJ2GEJ 103 X (10 k) 103.2/27.3 R781 ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k) ERJ2GEJ 104 X (100 k) R782 7030005090 S.RES В 107/33.3 R783 7030005090 S.RES 107/31.6 Т R784 7030005090 S.RES 70.4/17 7030007290 S.RES ERJ2GEJ 222 X (2.2 k) ERJ2GEJ 394 X (390 k) T B 64.4/22.2 74.6/11.8 7030006610 S.RES R786 7030007340 S.RES ERJ2GEJ 153 X (15 k) В 102.3/30 R787 ERJ2GEJ 103 X (10 k) ERJ2GEJ 102 X (1 k) ERJ2GEJ 101 X (100) R788 7030005050 S.RES B T 101.9/32.1 R789 7030005120 S.RES 118.9/142. S.RES 7030004980 R790 66.9/91.5 ERJ2GEJ 101 X (100) ERJ2GEJ 101 X (100) 7030004980 S.RES S.RES 66.9/90.2 R791 R792 7030004980 17.5/91.7 ERJ2GEJ 101 X (100) ERJ2GEJ 223 X (22 k) R793 7030004980 S.RES 17.5/89.5 R794 7030005220 S.RES В 12.9/67.6 ERJ2GEJ 223 X (22 k) ERJ2GEJ 225 X (2.2 M) R795 7030005220 S.RES В 58/68.4 7030007320 S.RES Т R796 98.2/31 S.RES S.RES ERJ2GEJ 224 X (220 k) ERJ2GEJ 224 X (220 k) R797 7030005110 101.9/28.3 R798 7030005110 100.6/30.1 ERJ2GEJ 224 X (220 k) ERJ2GEJ 224 X (220 k) R799 7030005110 S.RES 98.4/28.3 7030005110 S.RES R800 99.4/30.5 ERJ2GEJ 100 X (10) ERJ2GEJ 222 X (2.2 k) R801 7030005530 S.RES B 27.3/24.8 7030007290 S.RES R802 B T B 36.5/21.6 7030008290 S.RES S.RES ERJ2GEJ 183 X (18 k) ERJ2GEJ 183 X (18 k) 72.5/17 60.8/27.3 R804 R805 7030008290 S.RES S.RES ERJ2GEJ 223 X (22 k) ERJ2GEJ 224 X (220 k) R806 7030005220 60.6/24.8 B B B 7030005110 56.4/27.3 R807 R808 7030005070 S.RES ERJ2GEJ 683 X (68 k) ERJ2GEJ 224 X (220 k) 55.9/26.1 45.1/32.8 S.RES 7030005110 R809 7030005090 7030007300 ERJ2GEJ 104 X (100 k) ERJ2GEJ 332 X (3.3 k) R810 S.RES В 60.1/26 S.RES R811 9.8/66 R812 7410001230 SARY FXB28V101.IX В 101 8/78 4 S.ARY 108.8/60.7 EXB28V101JX В 7410001230 R813 EXB28V101JX ERJ2GEJ 104 X (100 k) R814 7410001230 S.ARY В 100/76.6 7030005090 S.RES В 123.3/85.8 R815 R816 7030005090 S.RES S.RES ERJ2GEJ 104 X (100 k) ERJ2GEJ 473 X (47 k) B T 121.9/87.9 120.4/79.4 7030005240 R817 ERJ2GEJ 473 X (47 k) ERJ2GEJ 473 X (47 k) ERJ2GEJ 105 X (1 M) ERJ2GEJ 153 X (15 k) R818 7030005240 SRES 120 4/78 5 7030005240 S.RES 120.4/77.6 R819 R820 7030005160 SRES B T 123 4/53 5 S.RES 120.7/53.1 7030007340 R821 R822 7030008410 7030006610 S.RES S.RES ERJ2GEJ 392 X (3.9 k) ERJ2GEJ 394 X (390 k) 120.7/54 105.3/53.9 R823 ERJ2GEJ 101 X (100) ERJ2GEJ 394 X (390 k) ERJ2GEJ 394 X (390 k) R825 7030004980 SRES 120 3/67 9 R826 7030006610 S.RES 104.4/53.9 R827 7030006610 SRES 112 6/53 7 ERJ2GEJ-JPW R828 7030010040 S.RES 114.7/105.4 ERJ2GEJ 104 X (100 k) ERJ2GEJ 101 X (100) 109.4/99.5 128.7/69.6 R829 7030005090 S.RES R830 7030004980 S.RES R831 7410001230 S.ARY EXB28V101JX В 119/86.6 ERJ2GEJ 101 X (100) ERJ2GEJ 101 X (100) ERJ2GEJ 101 X (100) 7030004980 S.RES 120/85.1 R832 ВВ R833 7030004980 S.RES 120.7/84.5 7030004980 S.RES 127.8/73.5 R835 ERJ2GEJ 101 X (100) EXB28V101JX R836 7030004980 SRES 127 6/75 5 118.8/59.3 R838 ERJ2GEJ 101 X (100) ERJ2GEJ 102 X (1 k) ERJ2GEJ 103 X (10 k) R839 7030004980 SRES В 117.7/57.9 71.2/37.7 R840 7030005120 S.RES B T R841 7030005050 S.RES 73.3/34.7 R842 7030005240 S.RES ERJ2GEJ 473 X (47 k) 67.2/34.9 ERJ2GEJ 333 X (33 k) ERJ2GEJ 102 X (1 k) ERJ2GEJ 473 X (47 k) R843 7030005060 SRES R 68 6/35 3 В R844 7030005120 S.RES 30.2/31.5 B T R845 7030005240 SRES 27 8/36 6 ERJ2GEJ 103 X (10 k) R846 7030005050 S.RES 27.4/35.2 ERJ2GEJ 333 X (33 k) ERJ2GEJ 103 X (10 k) R847 7030005060 SRES B T 29 1/36 2 7030005050 74.8/39.3 R848 R849 7030005050 S.RES ERJ2GEJ 103 X (10 k) 28.6/41.4 R850 7030008300 S.RES ERJ2GEJ 184 X (180 k) 112.7/119.5 ERJ2GEJ 473 X (47 k) R851 7030005240 SRES 121 4/82 5 7520000250 PRF18BE471QB1RB 78.7/149.4 R852 S.POS R853 7520000250 SPOS PRF18BF471QB1BB 42 6/138 9 ERJ2GEJ 101 X (100) ERJ2GEJ-JPW 7030004980 S.RES R856 36.5/122.7 R857 7030010040 S.RES 34.2/117.5 ERJ2GEJ-37 W ERJ2GEJ 474 X (470 k) ERJ2GEJ 474 X (470 k) R858 7030005170 S.RES 124.8/25.7 R859 7030005170 SRES 121 7/26 1 S.RES ERJ2GEJ 473 X (47 k) 107.3/81.1 R860 7030005240 ERJ2GEJ 473 X (47 k) ERJ2GEJ 105 X (1 M) **R861** 7030005240 SRES 104 1/70 1 7030005160 S.RES 114.3/100.3 R862 ERJ2GEJ 473 X (47 k) R863 7030005240 S.RES 108.9/79.7 ERJ2GEJ 473 X (47 k) ERJ2GEJ 103 X (10 k) S.RES R864 105.2/84.3 R865 7030005050 S.RES 121.1/69.9 R866 7030005050 S.RES ERJ2GEJ 103 X (10 k) 121.5/65.5 ERJ2GEJ 103 X (10 k) ERJ2GEJ 104 X (100 k) **B867** 7030005050 SRES 121 5/63 R868 7030005090 S.RES B 114.8/52.8 R869 7030010040 S.RES ERJ2GEJ-JPW Т 70.6/43 ERJ2GEJ-JPW ERJ2GEJ 104 X (100 k) S.RES 74.8/42.2 7030010040 R871 7030005090 S.RES 111.9/118.6 7030005220 ERJ2GEJ 223 X (22 k) ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k) S.RES 111.9/117.7 R872 R873 7030005050 SRES 7/119 R874 7030005050 S.RES 100.6/97.7 S.RES ERJ2GEJ 102 X (1 k) R875 7030005120 Т 46.1/126.9 ERJ2GEJ 104 X (100 k) ERJ2GEJ-JPW S.RES 7030005090 49.6/118.5

7030010040

7030005110

7030005110

7030006610

7030006610 S.RES

7030006610 S.RES 7030010040 S.RES

S.RES

S.RES

S.RES

S.RES

ERJ2GEJ 224 X (220 k) ERJ2GEJ 224 X (220 k)

ERJ2GEJ 394 X (390 k) ERJ2GEJ 394 X (390 k)

ERJ2GEJ 394 X (390 k) ERJ2GEJ-JPW

R877

R878

R879

R880

R881

R882

#### [MAIN LINIT]

LINIAIN	AIN UNIT]									
REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION					
R884	7510001770	S.TMR	NTCG10 4LH 473JT	Ţ	52.7/61.2					
R885	7510001770	S.TMR	NTCG10 4LH 473JT	Т	7.3/60.4					
C1	4030016930	S.CER	ECJ0EB1A104K	В	97.3/104					
C2 C3	4030016930 4030017460	S.CER S.CER	ECJ0EB1A104K ECJ0EB1E102K	T B	8/119 99/99.7					
C4	4030016930	S.CER	ECJ0EB1A104K	Т	20.7/111.9					
C5 C6	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	87.2/107.1 5.8/89.1					
C7 C8	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K	T	103.6/85.8					
C9	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	Т	90/74.9 46.6/82.9					
C10 C11	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	17.7/97.7 72.4/96.3					
C12	4030017430	S.CER	ECJ0EC1H101J	Т	12.8/99.3					
C13 C14	4030017560 4030017560	S.CER S.CER	ECJ0EC1H2R5B ECJ0EC1H2R5B	T T	14.1/99 72.8/100.5					
C15 C16	4030017570 4030017460	S.CER S.CER	ECJ0EC1H040B ECJ0EB1E102K	T	10.4/100.2 85.9/77.8					
C17	4030016930	S.CER	ECJ0EB1A104K	Т	104.1/102.8					
C18 C19	4030016930 4030017460	S.CER S.CER	ECJ0EB1A104K ECJ0EB1E102K	T B	19.3/128.7 88/88.4					
C21	4030017460	S.CER S.CER	ECJ0EB1E102K	Т	18.2/100.4					
C23 C24	4030017460 4030017570	S.CER	ECJ0EB1E102K ECJ0EC1H040B	T	77.3/96.8 11/105					
C25 C26	4030017560 4030017560	S.CER S.CER	ECJ0EC1H2R5B ECJ0EC1H2R5B	T	15.3/99.3 73.9/99.4					
C27	4030017340	S.CER	ECJ0EC1H010B	Т	10.6/107.1					
C28 C29	4030017460 4030017530	S.CER S.CER	ECJ0EB1E102K ECJ0EC1H0R5B	T	18.2/102.9 14.1/103.8					
C30	4030017460	S.CER	ECJ0EB1E102K	Т	53.9/29.8					
C31 C32	4030017660 4030017530	S.CER S.CER	ECJ0EC1H330J ECJ0EC1H0R5B	B	88.6/65.7 15.8/103.8					
C33 C34	4030017590	S.CER	ECJ0EC1H070C	T	17/102.5					
C35	4030017590 4030017460	S.CER S.CER	ECJ0EC1H070C ECJ0EB1E102K	†	77.3/99.9 10.6/106.2					
C36 C37	4030017520 4030017640	S.CER S.CER	ECJ0EC1H0R3B ECJ0EC1H150J	T	76.8/102.9 17/105.2					
C38	4030017530	S.CER	ECJ0EC1H0R5B	Т	78/101.8					
C39 C40	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	78/99.3 18.2/104.7					
C41	4030017640	S.CER	ECJ0EC1H150J	Т	79.9/102.5					
C43 C44	4030017670 4030016930	S.CER S.CER	ECJ0EC1H390J ECJ0EB1A104K	B	90.1/65.7 35.2/76.2					
C45	4030017460	S.CER	ECJ0EB1E102K	T	80.4/101.7					
C46 C47	4030017600 4030017460	S.CER S.CER	ECJ0EC1H080C ECJ0EB1E102K	T	14.1/107.7 18.9/108.7					
C48 C49	4030017570 4030017600	S.CER S.CER	ECJ0EC1H040B ECJ0EC1H080C	T	14.6/109.1 79.6/105.7					
C50	4030017570	S.CER	ECJ0EC1H040B	Т	81.4/107					
C51 C53	4030017460 4030017340	S.CER S.CER	ECJ0EB1E102K ECJ0EC1H010B	T	83.3/103.4 11.4/113.1					
C54	4030017660	S.CER	ECJ0EC1H330J	В	89.4/69					
C55 C56	4030017610 4030017610	S.CER S.CER	ECJ0EC1H090C ECJ0EC1H090C	T	15.3/108.1 80.7/106.3					
C57 C58	4030017340	S.CER S.CER	ECJ0EC1H010B ECJ0EB1E102K	T	11.1/115.3					
C59	4030017460 4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	В	17/110 92.1/71.5					
C60 C61	4030017640 4030017460		ECJ0EC1H150J ECJ0EB1E102K	B	45.2/68.8 17.5/112.4					
C62	4030017460	S.CER	ECJ0EB1E102K	Т	83.3/106					
C63 C64	4030017460 4030017370		ECJ0EB1E102K ECJ0EC1H3R5B	T	85.6/105.6 11.1/120.2					
C65	4030017460	S.CER	ECJ0EB1E102K	В	90.3/70.7					
C66 C67	4030017460 4030017550		ECJ0EB1E102K ECJ0EC1H1R5B	T	16/114.6 10.6/121.4					
C68	4030017460		ECJ0EB1E102K	B B	42.6/73.9 78.4/76.5					
C69 C70	4030017460 4030017620	S.CER	ECJ0EB1E102K ECJ0EC1H100C	В	43.4/69.7					
C71 C72	4030017600 4030017460		ECJ0EC1H080C ECJ0EB1E102K	T	15.7/115.8 12.3/128.1					
C73	4030017460	S.CER	ECJ0EB1E102K	Т	13/122.9					
C74 C75	4030017460 4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	12.7/115.5 88/104.5					
C76 C77	4030017460 4030017360	S.CER	ECJ0EB1E102K ECJ0EC1H030B	T T	86.8/109.4 17/116.2					
C78	4030017600	S.CER	ECJ0EC1H080C	Т	89.6/107					
C79 C80	4030017460 4510008520		ECJ0EB1E102K EEE1CA470SP	B T	79.6/76.1 51.8/128.3					
C81	4030017460	S.CER	ECJ0EB1E102K	В	87.5/71.9					
C82 C83	4030017360 4030017460	S.CER S.CER	ECJ0EC1H030B ECJ0EB1E102K	T B	90.9/106.5 82.4/74.4					
C84	4030017350	S.CER	ECJ0EC1H020B	В	86.1/70.4					
C85 C86	4030017460 4030017460		ECJ0EB1E102K ECJ0EB1E102K	T B	19.7/116.4 45.5/75.3					
C87 C88	4030017360 4030017460	S.CER S.CER	ECJ0EC1H030B ECJ0EB1E102K	B T	41.3/74.9 51.3/118.1					
C89	4030017460	S.CER	ECJ0EB1E102K	В	81/72.8					
C90 C91	4030017460 4030017590		ECJ0EB1E102K ECJ0EC1H070C	T	90.1/102.8					
C92	4030017460	S.CER	ECJ0EB1E102K	T B	20.1/118.9					
C93 C94	4030017360 4030017460	S.CER	ECJ0EC1H030B ECJ0EB1E102K	Т	40.1/75.4 50.7/132.3					
C95 C96	4030017370 4030017530	S.CER S.CER	ECJ0EC1H3R5B ECJ0EC1H0R5B	T	11.1/127.4 14.5/120					
C97	4030017530	S.CER	ECJ0EC1H0R5B	Т	17.8/120.6					
C98 C99	4030017590 4030017460		ECJ0EC1H070C ECJ0EB1E102K	T	93.1/104.4 94.7/103.5					
C100	4030017520	S.CER	ECJ0EC1H0R3B	Т	95.5/107					
C101 C102	4030017530 4030017590	S.CER S.CER	ECJ0EC1H0R5B ECJ0EC1H070C	T	95.5/105.4 18.7/121.5					
C103 C104	4030017460 4030017350	S.CER S.CER	ECJ0EB1E102K ECJ0EC1H020B	T B	19.6/121.5 38.5/76.6					
U 104	7000017330	J.OER	20020 IT 1020D		00.0/10.0					

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

37/138.3

100.5/38.1

99.4/37.2

107.7/57.2

103/55.8

111.6/55.4 128.5/58.9

Т

[MAIN UNIT]

REF NO.	ORDER NO.		DESCRIPTION	M.	H/V LOCATION		REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
C105	4030017590	S.CER	ECJ0EC1H070C	Т	97.4/104.4		C215	4030017460	S.CER	ECJ0EB1E102K	Т	72.5/107.6
C106	4030017460	S.CER	ECJ0EB1E102K	Ţ	97.3/103.2		C216			ECJ0EB1A104K	В	35.5/109.1
C107 C108	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	19.8/123.3 100.3/102	ΙI	C217 C218	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	62.4/104.8 38.5/103.3
C109	4030017650	S.CER	ECJ0EC1H270J	В	84.5/77.3		C219	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	72.1/109.2
C110 C111	4030017630	S.CER S.CER	ECJ0EC1H120J ECJ0EB1E102K	B	85.7/77.9 36/79.9		C220 C221	4030017460 4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	86.9/143.8 40.8/111.2
C112	4030017360	S.CER	ECJ0EC1H030B	T	15.9/123.9		C222	4030017460	S.CER	ECJ0EB1E102K	T	58.1/104
C113	4030017360	S.CER	ECJ0EC1H030B ECJ0EC1H1R5B	T	100/105.7 14.7/124.3		C223 C224	4030017460 4030011060	S.CER	ECJ0EB1E102K GRM31M2C2H4R0CY21L	T B	64.6/104 37.4/131.1
C114 C115	4030017550	S.CER	ECJ0EC1H1R5B ECJ0EC1H1R5B	+	98.1/108.4		C225	4510008110	S.ELE	16 CE 22 BS	T	82.7/142.6
C116	4030017460	S.CER	ECJ0EB1E102K	Ţ	102.2/108.6		C226	4030017460	S.CER	ECJ0EB1E102K	В	73/139.6
C117 C118	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	15.7/129 98.1/110		C227 C228	4030017200	S.CER	GRM31BR32J102KY01L ECJ0EB1C103K	B	80.5/143.3 43.3/102.5
C119	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	103.1/108.6		C229	4030017460	S.CER	ECJ0EB1E102K	Т	40.3/106.5
C120 C121	4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	T B	18.3/126.7 79.1/80.6		C230 C231	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	44.2/123.3 28.5/136
C122	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H070C	В	35.2/75.3		C232	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	В	43/110.8
C123 C124	4030017590	S.CER	ECJ0EC1H070C ECJ0EC1H020B	B	42.8/82.9 41.5/84.3		C233 C234	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H030B	T	40.9/107.2 54.9/107.7
C125	4030017350	S.CER	ECJ0EC1H020B ECJ0EC1H020B	В	40/84.3		C235	4030017460	S CFR	ECJ0EB1E102K	T	68.6/109.8
C126 C127	4030017350	S.CER	ECJ0EC1H020B	T	99/116.1		C236 C237	4030017600	S.CER	ECJ0EC1H080C ECJ0EB1E102K	T	42.5/108.7
C128	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	+	29.8/130.1 99.4/114.4		C238	4030016930	S.CER	ECJ0EB1A104K	B	60.1/109 43/109.9
C129	4030017460	S.CER	ECJ0EB1E102K	В	78.7/75.3		C239	4030017360	S.CER	ECJ0EC1H030B	T	61.3/107.7
C130 C131	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H330J	B	80.7/80.6 87.3/83.9		C240 C241	4030017460 4030016950	S.CER	ECJ0EB1E102K ECJ0EB1A473K	B	86.9/146.1 44/107.8
C132	4030017620	S.CER	ECJ0EC1H330J ECJ0EC1H100C	В	86.8/85.1		C242	4030017600	S.CER	ECJ0EC1H080C	T	73.3/112.9
C133 C134	4030017350	S.CER S.FLF	ECJ0EC1H020B EEE1CA100SB	T	25/129.2 79.5/77.4		C243 C244	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	65.4/110.2 72.1/110.8
C135	4030017460	S.CER	EEE1CA100SR ECJ0EB1E102K	T	27.4/136		C246	4030017460	S.CER	ECJ0EB1E102K	В	88.5/87.3
C136 C137	4030017460	S.CER	ECJ0EB1E102K	T	28.7/132.3 26.1/132.1		C247 C249	4030017430	S.CER	ECJ0EC1H101J ECJ0EC1H101J	T	63.8/109.4 57.3/109.4
C138	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	В	99.5/96.1		C251	4030017460	S.CER	ECJ0EB1E102K	T	38.2/138.8
C139	4030017460	S.CER	ECJ0EB1E102K	T	103.9/114.8 103/114.8		C252	4030017430	S.CER	ECJ0EC1H101J	T	45.9/108.1
C140 C141	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H180J	B	85.4/85.1		C253 C254	4030017370	S.CER	ECJ0EC1H3R5B ECJ0EB1E102K	B	60.4/110.9 45.6/110.2
C142	4030017460	S.CER	ECJ0EB1E102K	В	44/86.7		C255	4030017370	S.CER	ECJ0EC1H3R5B	Ţ	53.9/110.7
C143 C144	4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	40.1/86.8 39.1/89.3		C256 C257	4030017430	S.CER	ECJ0EC1H101J ECJ0EB1E102K	T	76.5/115.8 46.4/106.4
C145	4030017460	S.CER	ECJ0EB1E102K	В	44/87.6		C258	4030017540	S.CER	ECJ0EC1HR75B	T	47.3/110.9
C146 C147	4030017360	S.CER S.CER	ECJ0EC1H030B ECJ0EC1H030B	T	29.6/134.2 104.8/114.8		C259 C260	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H0R5B	T	78.6/117 72.5/117.5
C148	4030017460	S.CER	ECJ0EB1E102K	T	29.1/136.4		C261	4030017660	S.CER	ECJ0EC1H330J	T	75.8/117.5
C149 C150	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	T B	105.7/115.7 38.6/86.8		C262 C263	4030017660 4030017460	IS.CER	ECJ0EC1H330J ECJ0EB1E102K	T B	47.3/109.3 73.3/134.7
C150	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	43.6/118.5		C264	4030017460	S.CER	ECJ0EB1E102K	T	48.2/106.9
C152	4030017460	S.CER	ECJ0EB1E102K	T	22.4/129.4		C265	4030017460	S.CER	ECJ0EB1E102K GRM31M2C2H150JV01L	В	32.4/133.8
C153 C154	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	49.2/116.4 87.9/114.5		C266 C267	4030011160	S.CER	ECJ0EB1E102K	B	78.7/147.2 78.2/118.4
C155	4030011160	S.CER	GRM31M2C2H150JV01L ECJ0EB1E102K	В	84.8/124.7		C268	4030017430	S.CER	ECJ0EC1H101J	T	48.6/108.1
C156 C157	4030017460	S.CER S.CER	GRM31M2C2H330JV01L	B	46/103.9 87.1/133.8		C270 C271	4510008110 4030017430	S.ELE S.CFR	16 CE 22 BS FC-I0FC1H101.I	T	43.8/130.3 77/118.8
C159	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H030B	T	62.5/99		C272	4030011020	S.CER	ECJ0EC1H101J GRM31M4C2H1R0CY21L GRM31M2C2H120JV01L)	В	36.1/134.5
C160 C161	4030017360	S.CER S.CER	ECJ0EC1H030B GRM31M4C2H1R0CY21I	T B	22.3/99.2 83.6/131.4		C273 C274	4030011140	S.CER	GRM31M2C2H120JV01L) ECJ0EB1E102K	B	32.6/136.7 46.3/130.5
C162	4030011140	S.CER	GRM31M4C2H1R0CY21L GRM31M2C2H120JV01L ECJ0EC1H080C	В	80.2/133.9		C275	4030017190	S.CER	GRM31AR32J471KW01D	В	41/134.5
C163 C164	4030017600	S.CER	ECJ0EC1H080C ECJ0EB1E102K	T B	26.1/99.8 78.5/132.3		C278 C279	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H101J	B	46/104.8 93/119.9
10105	400004=400	0.000	EO IOED (E (OO)	1 -	000/000		C280	4030017460	S.CER	ECJ0EB1E102K	Ϊ́Τ	93.4/123.1
C166 C167	4030011020	S.CER	ECJOEBTE102K GRM31M4C2H1R0CY21L ECJ0EC1H030B ECJ0EC1H030B ECJ0EC1H080C ECJ0EB1E102K ECJ0EB1E102K GRM31M4C2H1R0CY21L GRM31M4C2H130JV01L	B	36.4/121.4 53.6/98.9		C281 C282	4030006960	S.CER	C1608 CH 1H 050C-T	B	30.5/142.7
C168	4030017460	S.CER	ECJ0EC1H030B	+	68.6/97.6		C283	4030017400	S.CER	ECJ0EC1H080C	+	74.2/122.5
C169	4030017600	S.CER	ECJ0EC1H080C	T	67.2/99.6		C284	4030017460	S.CER	ECJ0EB1E102K	T	104.3/106.6
C170 C171	4030017460	S.CER	ECJ0EB1E102K ECJ0EB1E102K	+	57.1/98.1 60/98.9		C285 C286	4030017600	S.CER	GRM31M3C2H3R0CY21L	B	40.1/138.1
C173	4030011020	S.CER	GRM31M4C2H1R0CY21L	В	40.5/118.2		C287	4030017460	S.CER	ECJ0EB1E102K	Ţ	87.6/122.1
C174 C175	4030011150	S.CER	ECJ0EC1H101J	T	37.1/116.7 29.6/103.1		C288 C289	4030017570	S.CER	ECJ0EC1H040B ECJ0EB1E102K		74.2/127.5
C176	4030017460	S.CER	ECJ0EB1E102K	В	39.2/114.9		C290	4030017460	S.CER	ECJ0EB1E102K	Ī	56.9/119.7
C178 C179	4030017460	S.IAN S.CFR	GRM31M2C2H130JV01L GRM31M2C2H130JV01L ECJ0EC1H101J ECJ0EB1E102K TEESVA 1C 225M8R ECJ0EC1H101J ECJ0EC1H0R5B ECJ0EB1E102K ECJ0EB1E102K ECJ0ECH0R5B ECJ0EB1E102K ECJ0ECH0R5B ECJ0ECH1330J ECJ0EC1H0R5B ECJ0EC1H0R5B ECJ0EC1H0R5B ECJ0EC1H0R5B ECJ0EC1H0R5B ECJ0ECH1B30J ECJ0EB1E102K ECJ0ECH1B30J ECJ0EB1E102K ECJ0ECH101J TEESVA 1C 225M8R ECJ0ECH101J TEESVA 1C 225M8R ECJ0ECH101J ECJ0ECH102K ECJ0ECH101J ECJ0ECH100B GRM31M4C2H10CY21L ECJ0EB1E102K ECJ0ECH1030B GRM31M4C2H10CY21L ERM31M4C2H10CY21L	B	37.6/102.3 30.5/104.7		C291 C292	4030017530	S.ELE S.CFR	16 CE 22 BS ECJ0EC1H0R5B	T	99.7/123 93.4/121 1
C179	4030017430	S.CER	ECJ0EC1H101J	Τ̈́	69.4/102.5		C293	4030017460	S.CER	ECJ0EB1E102K	<del>'</del>	106.4/122.3
C182 C183	4030017530	S.CER	ECJ0EC1H0R5B ECJ0ER1E102K	T	31.4/100.5 35.5/105		C294 C295	4030017460	S.CER	ECJ0EB1E102K	T	73.3/123.4
C184	4030017460	S.CER	ECJ0EB1E102K	T	71.1/102.5		C296	4030011460	S.CER	GRM31M2C2H6R0DV01L	В	42.6/143.2
C185 C186	4030017660	S.CER	ECJ0EC1H330J	T	31.4/102.1 75/133		C297 C298	4030011730	S.CER	GRM31M2C2H101JV01L	B	33.6/146.8
C186	4030017460	S.CER	ECJ0EC1H0R5B	T	66.1/104.1		C298 C299	4030017460	S.CER	ECJ0EB1E102K	<del> </del>	82.5/122.1
C188	4030017660	S.CER	ECJ0EC1H330J	Ţ	69.4/104.1		C300	4030017440	S.CER	ECJ0EC1H221J	Ţ	86.4/119.4
C189 C190	4030017460	S.CER	ECJUEBTETUZK ECJ0EB1E102K	B	33.2/103.9 33.7/106.6		C301 C303	403001/460	S.CER	GRM31M2C2H4R0CY21L	B	42.6/148.3
C191	4030017430	S.CER	ECJ0EC1H101J	Ī	33.2/103		C304	4030017360	S.CER	ECJ0EC1H030B	Ī	84.2/119
C192 C193	4550002980	S. IAN S. CER	TEESVA 1C 225M8R FC-I0FR1F102K	B	89.7/89.9 71.2/105.8		C305 C306	4030017650	S.CER	ECJ0EC1H270J ECJ0ER1E102K		94.1/126.8
C193	4030017460	S.CER	ECJ0EB1E102K	<del>'</del>	56.9/100.3		C307	4030017460	S.CER	ECJ0EB1E102K	<del>'</del>	109.1/132
C195 C196	4030017430	S.CER	ECJ0EC1H101J	T	69.5/105.7 53.6/102.1		C308 C309	4030011080	S.CER	GRM31M2C2H6R0DV01L	B	42.6/153.2
C196 C197	4030017370	S.CER	ECJ0EB1E102K	<del> </del>	63.4/100.3		C309	4030017560	S.CER	GRM31M2C2H180JV01L	B	73.2/152.2
C198	4030011020	S.CER	GRM31M4C2H1R0CY21L	В	79.7/139.9		C311	4030017460	S.CER	ECJ0EB1E102K	Ţ	83.4/122.1
C199 C200	4030017460	S.CER	ECJ0EC1H030B	L R	40.8/112.1 60/102.1		C312 C313	4030017390	S.CER	ECJ0EC1F180J ECJ0EC1H050B	<del> </del>	106/127.6
C202	4030011020	S.CER	ECJ0EC1H030B GRM31M4C2H1R0CY21L GRM31M2C2H100JV01L ECJ0EC1H101J ECJ0EB1E102K	В	79.7/137.5		C314	4030017200	S.CER	GRM31BR32J102KY01L	B	73.2/154.5
C203 C205	4030011120	S.CER S.CFR	GRM31M2C2H100JV01L ECJ0EC1H101J	B	74.8/137.1 54.8/102.5		C315 C316	4030017460	S.CER S.CFR	ECJ0EB1E102K ECJ0EB1E102K	T	52.8/135.8 55.7/137.5
C206	4030017460	S.CER	ECJ0EB1E102K	T	67.4/107.6		C317	4030017460	S.CER	ECJ0EB1E102K	Т	99.8/130.4
C207 C208	4030017460	S.CER S.CFR	ECJ0EB1E102K ECJ0EB1E102K	T	35.6/102.8 37.3/103.1		C318 C319	4030011170	S.CER S.CER	GHM31M2C2H180JV01L ECJ0EC1H180J	B	69.4/153 97.6/132.3
C209	4030016950	S.CER	ECJ0EB1A473K	B	35.5/106.6		C320	4030007060	S.CER	C1608 CH 1H 270J-T	B	67.5/144.7
C210 C211	4030017460	S.CER	ECJ0EB1E102K	B	34.6/109.1		C321 C322	4030017580	S.CER	ECJ0EC1H060C	T	78.8/121.8
C211	4030017460	S.CER	ECJ0EB1E102K	В	76.8/139		C323	4030017460	S.CER	ECJ0EC1H020B	<del>'</del>	106.6/133.4
C213 C214	4030017460	S.CER	GRMS1M2C2H4R0CY21L	T	56/104.8		C324 C325	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H101J ECJ0EB1E102K C1608 CH 1H 050C-T ECJ0EB1E102K ECJ0EC1H080C ECJ0EC1H080C GRM31M3C2H3R0CY21L ECJ0EB1E102K ECJ0EC1H27UJ ECJ0EB1E102K ECJ0EC1H27UJ ECJ0EC1H030B ECJ0EC1H27UJ ECJ0EC1H080C ECJ0EC1H080C GRM31M2C2H6R0DV01L ECJ0EC1H060C GRM31M2C2H6R0DV01L ECJ0EC1H050B GRM31M2C2H180JV01L ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EC1H080D ECJ0EC1H080C ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EC1H080D ECJ0EC1H080D ECJ0EC1H080D ECJ0EB1E102K ECJ0EC1H080B	T	59/138.9
ا ا	1000011000	J.JLI1	S. 100 1012 021 171 100 12 1L		10.0/121.0	Ιl	JU20	1000017000	J.OLI1		<u> </u>	0.501103.0

[MAIN UNIT]

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C429

C430

C431 C432

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4030016930

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S.CER

S.CER

S.CER S.CER

SCER

S.CER

ECJ0EB1C103K

ECJ0EB1A104K

ECJ0EC1H220J ECJ0EC1H030B

ECJ0EC1H030B

ECJ0EB1A104K

#### REF ORDER H/V DESCRIPTION M LOCATION 61.5/144 C326 4030011220 S.CER GRM31M2C2H360JV01L В 4030018010 S.CER ECJ0EC1H360J 98.4/137 C328 4030017580 S.CER ECJ0EC1H060C 105.4/133.9 109.1/136.1 GRM31M2C2H270.IV01I В C3304030011190 S CFR 54/149 3 C331 C332 4030017440 S.CER S.CER 60.6/140.7 ECJ0EC1H221J 4030017650 ECJ0EC1H270J 100.3/138.8 C333 4030017570 S.CER ECJ0EC1H040B 105.2/138.4 C334 4030017580 S.CER ECJ0EC1H060C 67.7/142.7 C335 4030017660 S.CER ECJ0EC1H330J 29.1/152.3 C336 4030017460 S.CER ECJ0EB1E102K 67.9/115 C337 C338 4030017550 S.CER S.CER ECJ0EC1H1R5B 12.6/132.7 4030017580 ECJ0EC1H060C 104.7/140.9 C339 4030017430 S.CER ECJ0EC1H101J 10.6/134.3 C340 C341 4030017550 S.CER S.CER ECJ0EC1H1R5B 14.5/134.8 4030017460 ECJ0EB1E102K 65.9/142.7 GRM31M2C2H5R0CY21L C342 4030011070 S.CER 25/152.6 В C343 C344 S.CER S.CER ECJ0EC1H1R5B ECJ0EC1H050B 14.5/136.4 100.4/144.6 4030017550 4030017380 64.7/143.1 21.7/148.4 C345 4030017430 S.CER ECJ0EC1H101J C346 C347 4030011090 S.CER S.CER GRM31M2C2H7R0DV01L B T GRM31M4C2H2R0CY21L ECJ0EC1H070C 4030011040 16/139.6 C348 4030017590 S.CER 100.7/149.7 C349 C350 4030011040 4030017460 S.CER S.CER GRM31M4C2H2R0CY21L ECJ0EB1E102K 16/146.6 33.6/146.9 C351 4030017760 S.CER ECJ0EB1H222K 111.5/89.8 B T T C352 C353 C354 4030017460 S.CER ECJ0EB1E102K 117.4/93.8 S.CER S.CER 4030017460 ECJ0EB1E102K 110/95.4 4030017760 109.7/90.8 ECJ0EB1H222K B T T C355 C356 S.CER S.CER ECJ0EB1H392K ECJ0EB1H392K 114.9/92.6 107.5/94 4030018920 4030018920 C357 C358 S.CER S.CER 4030016970 FC.I0FB1C223k В 107.8/91.7 ECJ0EB1H182K 113.2/93.3 4030018080 C359 4030018080 S.CER S.CER ECJ0EB1H182K 106.2/94.3 C360 ECJ0EB1C153K 4030016780 113.2/92.4 C361 C362 S.CER S.CER 113.1/86.9 107.5/93.1 4030016970 ECJ0EB1C223k ECJ0EB1C153K 4030016780 C363 4030017460 S CFR EC INFR1F102K T 51/18.9 S.CER C364 ECJ0EB1C103K 4030016790 110/83.6 C365 C366 4030018080 S.CER FC.I0FR1H182K 114/85 9 4030017460 S.CER ECJ0EB1E102K 74.8/28.6 B T B T C367 C368 4030017040 S.CER S.CER ECJ0EB1A333K ECJ0EB1E102K 111.8/94.5 4030017460 110.6/90.1 C369 C370 C371 4030017460 S CFR FC.I0FB1F102K 110.9/94.5 4030017040 S.CER ECJ0EB1A333K 111.9/85.9 4030017040 S CER FCJ0FB1A333K 104 4/95 9 C372 S.CER 4030016790 ECJ0EB1C103K 104.9/88.6 C373 C374 4030018080 S.CER S.CER ECJ0EB1H182K ECJ0EB1E102K B T 103.7/91.6 103.5/96.3 4030017460 C375 4030016780 SCFR FCJ0FB1C153K 112 8/91 C376 C377 4030016790 S.CER S.CER ECJ0EB1C103K B T 108.8/90.8 4030016780 EC.I0EB1C153K 104 8/93 C378 4030017790 S.CER ECJ0EB1E682K 109.1/84.5 C379 C380 S.CER S.CER ECJ0EB1A333K ECJ0EB1C103K 4030017040 B T 104.6/90 4030016790 111.6/90.6 C381 4030016790 S.CER FCJ0FB1C103K 104 4/91 8 C382 4030017790 S.CER ECJ0EB1E682K B B T 104.1/87.2 C383 4030017460 S.CER ECJ0EB1E102K 105.3/86.7 C384 4030017460 S.CER ECJ0EB1E102K 108.1/91.7 C385 C386 4030017460 S.CER FCJ0FB1F102K B B 20/46.3 ECJ0EB1C103k 103.4/85 4030016790 B T T C387 4030017360 S CFR FCJ0FC1H030B 24 4/51 8 C388 C389 4030017460 S.CER ECJ0EB1E102K 101.2/92 S.CER ECJ0EB1E102K 4030017460 105.3/86.4 C390 4030017460 S.CER ECJ0EB1E102K 99/87.9 C392 4030018860 S.CER EC.I0EB0.I105K В 22 8/46 8 S.CER ECJ0EC1H070C ВВ C393 4030017590 26/51.8 C394 4550003220 S TAN TEESVA 1F 105M8R 16 5/37 1 22.8/45.9 C395 S.CER ECJ0EB0J105K В 4030018860 C396 4030017570 S.CER ECJ0EC1H040B В 26 5/50 1 C397 4030016790 S.CER ECJ0EB1C103k 28.6/46.4 B C398 4030017500 S.CER ECJ0EC1H560J 25.3/49.6 C399 4030016790 S.CER ECJ0EB1C103K 109.7/87.2 C400 4030016930 S CFR FCJ0FB1A104K B T 56 6/42 5 31.2/45.2 C401 S.CER 4030016930 C402 4030017730 S CFR FC.I0FB1F471K T T 50 5/30 1 C403 C404 4030017460 S.CER ECJ0EB1E102K В 54/63.8 C405 C406 S.CER ВВ 4030017460 ECJ0EB1E102K 20.5/40.9 4030017380 SCFR FCJ0FC1H050B 26/45.9 C407 S.CER 4030016790 ECJ0EB1C103K 53.7/37.4 C408 4030017620 SCFR FCJ0FC1H100C B B 24 4/40 9 C410 4030016930 S.CER ECJ0EB1A104K 22.6/40.9 C411 4030017460 S.CER ECJ0EB1E102K В 26.7/42.1 ВВ 4030016930 C414 S.CER ECJ0EC1H470J 4030017420 29.7/48.8 C415 4030017730 S.CER ECJ0EB1E471K 29.5/48 C416 4030017460 SCFR FC.I0FB1F102K B 54/69 1 C417 4030017460 S.CER ECJ0EB1E102K В 51/37.4 C418 4030017440 S.CER ECJ0EC1H221J T T T 56.1/62.6 C419 C420 54.8/61.6 4030017440 S.CER ECJ0EB0J224K 4030018890 30.4/46.5 C421 4030017730 S.CER ECJ0EB1E471K В 27.7/49.9 C422 4030017620 S CFR FCJ0FC1H100C 54 8/63 C423 4030016930 S.CER ECJ0EB1A104K B 54.1/40.9 F931C475MAABMA B T B 53.8/44.1 C424 4550007260 S.TAN C425 4030018860 S.CER ECJ0EB0J105K 52.9/39.4 4030016930 S.CER ECJ0EB1A104K C426 54/60.9

#### TMAIN HINHTI

LIMAIN	I UNIT]	UNIT]					
REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION		
C433	4030017040	S.CER	ECJ0EB1A333K	B	56.3/70.2		
C434	4030017420	S.CER	ECJ0EC1H470J	T	32.6/49.1		
C435	4030017680	S.CER	ECJ0EC1H820J	B	55.8/68.4		
	4550006050	S.TAN	TEESVA 0J 106M8R	T	56.9/65.9		
C436 C437	4030016930	S.CER	ECJ0EB1A104K	Т	58.8/63.1		
C439	4550007080	S.TAN	TEESVA 1C 106M8R	B	84.7/42.7		
C440	4550007080	S.TAN	TEESVA 1C 106M8R		28.5/43		
C441	4030017570	S.CER	ECJ0EC1H040B	Т	33.5/49.1		
C442	4030016930	S.CER	ECJ0EB1A104K	T	53.5/66.8		
C443	4030017420	S.CER	ECJ0EC1H470J	B	86.7/43.7		
C444	4030017460	S.CER	ECJ0EB1E102K	Т	35.2/46.3		
C445	4030017460	S.CER	ECJ0EB1E102K	B	61.5/69.3		
C446	4030017430	S.CER	ECJ0EC1H101J	T	40/49.3		
C447	4030016950	S.CER	ECJ0EB1A473K	T	25.1/43.5		
C448	4030016790	S.CER	ECJ0EB1C103K		34.4/49.1		
C450	4030016790	S.CER	ECJ0EB1C103K	В	7/36.8		
C451	4550000530	S.TAN	TEESVA 1V 104M8R	T	24/36.8		
C452	4030017460	S.CER	ECJ0EB1E102K		28.6/42.3		
C453	4550003220	S.TAN	TEESVA 1E 105M8R	Т	59.3/38.3		
C454	4030017460	S.CER	ECJ0EB1E102K	B	6.1/36.8		
C455	4030016930	S.CER	ECJ0EB1A104K	B	11.1/41.2		
C456	4550006250	S.TAN	TEESVA 1A 106M8R	T	24/34.7		
C457	4030016930	S.CER	ECJ0EB1A104K	B	38.3/38.6		
C458	4550007260	S.TAN	F931C475MAABMA	В	7.4/43.2		
C459	4030017730	S.CER	ECJ0EB1E471K	T	10.5/42.8		
C460	4030017460	S.CER	ECJ0EB1E102K	B	8.5/63.4		
C461	4030017460	S.CER	ECJ0EB1E102K	В	62.7/63.5		
C462	4030017460	S.CER	ECJ0EB1E102K	B	61/67.8		
C463	4030016930	S.CER	ECJ0EB1A104K	B	7.7/40.3		
C464	4030017460	S.CER	ECJ0EB1E102K	T	35.1/38.1		
C466	4510009120	S.ELE	EEE1VA2R2NR	B	76.5/34.8		
C467	4030017460	S.CER	ECJ0EB1E102K	В	60.6/66.6		
C468	4030017040	S.CER	ECJ0EB1A333K	B	11.7/68		
C469	4030017420	S.CER	ECJ0EC1H470J		80.6/42.9		
C470	4030018860	S.CER	ECJ0EB0J105K	Т	5.6/38.5		
C471	4030016790	S.CER	ECJ0EB1C103K	T	5.6/40.3		
C472	4030016790	S.CER	ECJ0EB1C103K	B	65.6/66.8		
C473	4550000560	S.TAN S.CER	TEESVA 1V 334M8R	T B	31.7/34.7		
C474 C475	4030017490 4030017440	S.CER	C1608 JB 1A 105K-T ECJ0EC1H221J	Т	37.3/45.4 10.7/61.8		
C476	4030017440	S.CER	ECJ0EC1H221J	T	9.4/60.8		
C477	4030017400	S.CER	ECJ0EC1H220J		5.4/43.5		
C478	4030017460	S.CER	ECJ0EB1E102K	В	9.3/68		
C479	4030017520	S.CER	ECJ0EC1H0R3B	T	39.7/36.9		
C480	4030017620	S.CER	ECJ0EC1H100C		9.4/63.1		
C481	4030007080	S.CER	C1608 CH 1H 390J-T	T	35/42.5		
C482	4030017460	S.CER	ECJ0EB1E102K		42.2/40		
C483	4030017360	S.CER	ECJ0EC1H030B	В	67.2/65.9		
C484	4030009350	S.CER	C1608 CH 1H 3R5B-T	T	41.5/37.7		
C486	4030016930	S.CER	ECJ0EB1A104K	B	8.3/59.8		
C487	4030016930	S.CER	ECJ0EB1A104K	T	10.7/58.6		
C488	4030007010	S.CER	C1608 CH 1H 100D-T		38.4/40.9		
C489	4030007060	S.CER	C1608 CH 1H 270J-T	Т	38.4/39.7		
C490	4030017460	S.CER	ECJ0EB1E102K	T	37/45.5		
C491	4030017680	S.CER	ECJ0EC1H820J	B	10.5/67.6		
C492	4030006990	S.CER	C1608 CH 1H 080D-T	T	44.6/36.7		
C493	4030007030	S.CER	C1608 CH 1H 150J-T		44.6/35.4		
C495	4030016930	S.CER	ECJ0EB1A104K	Т	13.5/62.3		
C496	4030017460	S.CER	ECJ0EB1E102K	T	37/42.2		
C497	4030017640	S.CER	ECJ0EC1H150J	B	73.7/66.5		
C498	4030017340	S.CER	ECJ0EC1H010B	T	40.6/40.7		
C499	4030017460	S.CER	ECJ0EB1E102K		41.6/45.9		
C500	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H030B	В	74.4/73		
C501	4030017420	S.CER	ECJ0EC1H470J	T	35.7/44.6		
C502	4030017460	S.CER	ECJ0EB1E102K		45.9/40		
C503	4030016930	S.CER	ECJ0EB1A104K	Т	18.2/68		
C504	4030017460	S.CER	ECJ0EB1E102K	T	40/47.7		
C506	4550006050	S.TAN	TEESVA 0J 106M8R		11.6/65.1		
C507	4030017630	S.CER	ECJ0EC1H120J	B	72.4/74.9		
C508	4030017420	S.CER	ECJ0EC1H470J	T	42/38.8		
C509	4030017530	S.CER	ECJ0EC1H0R5B	Т	46.1/38.4		
C510	4030016930	S.CER	ECJ0EB1A104K	T	10/64.3		
C511	4030017460	S.CER	ECJ0EB1E102K		43.6/44.6		
C512	4030017400	S.CER	ECJ0EC1H220J ECJ0EB1E102K	T B	41.6/46.8		
C513 C514	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K	Т	17.8/68.5 67/81.1		
C515	4030017460	S.CER	ECJ0EB1E102K	B	18.8/64.4		
C516	4030017460	S.CER	ECJ0EB1E102K		44.1/46.8		
C517	4030017460	S.CER	ECJ0EB1E102K	В	15.5/66.2		
C518	4030016790	S.CER	ECJ0EB1C103K	T	64/81.1		
C519	4030017460	S.CER	ECJ0EB1E102K	B	14.9/67.5		
C521	4030017360	S.CER	ECJ0EC1H030B	T	45.8/45.2		
C522	4030017420	S.CER	ECJ0EC1H470J		45.8/46.1		
C523	4030016790	S.CER	ECJ0EB1C103K	В	20.8/66.8		
C524	4030017570	S.CER	ECJ0EC1H040B	T	46.2/47.3		
C525	4030016790	S.CER	ECJ0EB1C103K		63.1/92		
C526	4030017460	S.CER	ECJ0EB1E102K	T	36.3/63.2		
C527	4030017590	S.CER	ECJ0EC1H070C		44/63.3		
C528	4030016790	S.CER	ECJ0EB1C103K	Т	63.1/87.4		
C529	4030017640	S.CER	ECJ0EC1H150J	T	35.1/63.6		
C530	4030016790	S.CER	ECJ0EB1C103K		70.1/80.7		
C531	4030017360	S.CER	ECJ0EC1H030B	B	21.7/65		
C532	4030017590	S.CER	ECJ0EC1H070C	T	44/64.9		
C533	4030017590	S.CER	ECJ0EC1H070C	Т	44.9/67.6		
C534	4030017650	S.CER	ECJ0EC1H270J	T	34.9/65.1		
C535	4030017590	S.CER	ECJ0EC1H070C		43.9/69.4		
C536	4030017420	S.CER	ECJ0EC1H470J	T	35/57.1		
C537	4030017460	S.CER	ECJ0EB1E102K		74.1/81.6		
C538	4030017460	S.CER	ECJ0EB1E102K	Т	37.3/67.1		
C539	4030017640	S.CER	ECJ0EC1H150J	T	34.9/66.6		
C540	4030017390	S.CER	ECJ0EC1H180J	B	28.8/65.8		
C541	4030017730	S.CER	ECJ0EB1E471K	T	73.2/81.6		
C543	4030017360	S.CER	ECJ0EC1H030B	B	29.5/72.2		
C544	4030017350	S.CER	ECJ0EC1H020B	Ť	32.8/57.6		

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

52.9/41.2

56.1/59.4

51.9/44.4

31.2/48.3

31.6/46.5

55.3/65.1

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#### [MAIN UNIT] REF ORDER H/V DESCRIPTION M NO. LOCATION 4030017460 34.7/68.3 C547 S.CER ECJ0EB1E102K ECJ0EB1C103K 4030016790 S.CER 27.5/74.2 C549 4030017460 S.CER ECJ0EB1E102K T T 17.5/81.4 C550 73.2/90.5 C552 4030016790 SCFR FCJ0FB1C103K 14 5/81 3 C553 C554 S.CER S.CER Ť T 4030016790 ECJ0EB1C103K 74.1/90.5 4030017350 ECJ0EC1H020B 32.1/63.2 C555 4030016930 S.CER ECJ0EB1A104K 71.2/96.3 C556 4030017460 S.CER ECJ0EB1E102K 69.9/96.3 T T T C557 4030017430 S.CER ECJ0EC1H101J 30.7/63.6 C558 4030017340 S.CER ECJ0EC1H010B 30.7/65.2 C559 4030016790 S.CER S.CER ECJ0EB1C103K 13.2/92 ECJ0EC1H020B 30.7/66.8 C560 4030017350 C561 4030016790 S.CER ECJ0EB1C103K 13.6/87.7 S.CER S.CER S.CER C562 4030017600 ECJ0EC1H080C T 39.9/65.5 C563 4030017580 ECJ0EC1H060C 33.1/67.5 C564 4030016790 ECJ0EB1C103K 20.6/80.9 4030017460 4030017460 S.CER S.CER C565 C566 ECJ0EB1E102K ECJ0EB1E102K 30.7/68.9 42/69.1 C567 4030017460 S.CER ECJ0EB1E102K 41.5/65.1 4030017580 S.CER S.CER ECJ0EC1H060C T T T C568 33.1/68.8 C569 4030017460 ECJ0EB1E102K 24.7/81.8 C570 4030017730 S.CER ECJ0EB1E471K 23.4/81.8 C572 C573 S.CER S.CER ECJ0EB1C103K ECJ0EB1E102K 23.8/90.7 4030016790 4030017460 35.2/70.4 C574 4030016790 S.CER ECJ0EB1C103K 24.7/90.7 C575 C576 S.CER ECJ0EB1A104K 21.6/97.1 4030016930 T T T S.CER S.CER 4030017460 ECJ0EB1E102K 21.6/96.2 4030012610 C578 C2012 JB 1C 474K-T 120.4/134.3 C579 C580 ELE S.CER 16 ME 2200 HC ECJ0EB1A104K 4510006021 Т 110.8/137.4 4030016930 4030017420 4030017600 S.CER S.CER ECJ0EC1H470J ECJ0EC1H080C C581 18.2/19.5 37.8/59.1 C582 C584 4550002980 S.TAN S.CER TEESVA 1C 225M8R ECJ0EB1C103K 122.2/80.9 C585 В 121.2/89.2 4030016790 C586 C588 S.TAN S.CER TEESVA 1C 106M8R ECJ0EC1H180J B B T 4550007080 105.2/127. 4030017390 123.2/91.3 S.CER S.CER C589 4030017460 FCJ0FB1F102K 14.4/26.5 B T T C590 ECJ0EB1A104K 4030016930 111.2/93.1 S.CER S.CER C591 4030017460 FCJ0FB1F102K 10.9/16.1 C592 4030017460 ECJ0EB1E102K 7.5/24.6 C593 C594 4030017420 S.CER S.CER ECJ0EC1H470J ECJ0EC1H680J T B 126.6/18.3 123.4/89.9 4030017510 C596 4030016790 SCFR FCJ0FB1C103K B T 121 9/87 S.CER C597 ECJ0EB1E102K 4030017460 10.3/25 C598 4030017460 SCFR FCJ0FB1F102K В 99 5/130 4 S.CER ECJ0EC1H040B 125/94.6 C599 4030017570 B T T C600 C601 4030017040 S.CER S.CER ECJ0EB1A333K ECJ0EB1E102K 121.6/72.3 4030017460 8.9/15.1 C602 4030016930 SCFR FCJ0FB1A104K B T 97 3/121 S.CER S.CER ECJ0EB1E102K ECJ0EC1H220J C603 4030017460 123.6/76.2 C604 4030017400 B T 127/81 121.7/23 C605 4030017420 S.CER ECJ0EC1H470J C606 C607 4030012610 4030017420 S.CER S.CER C2012 JB 1C 474K-T ECJ0EC1H470J B T 99 8/123 122/24.8 C610 4030016930 S.CER FC.I0FB1A104K В 97.3/129.4 S.ELE S.ELE EEE1CA100SR EEE1CA100SR C611 4510008540 B T 102.1/15.7 C612 4510008540 104.5/50.1 C613 4550007080 S.TAN TEESVA 1C 106M8R 97.9/126.5 S.CER S.CER 113.6/90.1 C614 4030016930 ECJ0EB1A104K B B C616 4030016930 126.2/67.7 C617 4030016930 SCFR FC.I0FB1A104K 115 5/63 5 C618 C619 4030017460 S.CER ECJ0EB1E102K 113.1/116.3 S.CER ECJ0EB1A393K 4030016940 14.8/27.4 C620 4030016940 S.CER ECJ0EB1A393K 14.8/28.6 C621 4550006760 S TAN TEESVR21A336M8R 10 4/28 9 116.5/128. C622 4030017460 S.CER ECJ0EB1E102K C623 4030016930 SCFR FC.I0FB1A104K 17 1/29 8 S.CER C624 4030017490 C1608 JB 1A 105K-T 19.2/29.9 TEESVA 1C 225M8R ECJ0EB1E102K C625 4550002980 S.TAN 25 8/28 8 S.CER 111.4/124.7 C626 C627 4030016790 S.CER ECJ0EB1C103K В 107.9/62.6

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S.CER

S.CER

S.ELE

S.CER

S.CER

S CFR

S.CER

S.CER

S.TAN

S.CER

S.ELE

S.CER S.CER S.CER

S.CER

S.ELE

ECJ0EB1E102K

FCJ0FB1F102K

ECJ0EB1A104K

FC.I0FB1F102K

ECJ0EB1C103K

FCJ0FB1C223K

ECJ0EB1A104K

FC.I0FB1F102K

ECJ0EB1E102K

ECJ0EB1E332K

ECJ0EB1A104K

ECJ0EB1A104K

FCJ0FB1F332K

ECJ0EB1A104K

ECJ0EB1A104K

ECJ0EB1A104K

ECJ0EB1A104K

ECJ0EB1A104K

ECJ0EB1E102K

EEE1CA100SR

ECJ0EB1C223k

ECJ0EC1H220J

ECJ0EC1H220J EEE1CA100SR

C1608 JB 0J 475K-T

EEE1CA100SR C1608 JB 1A 105K-T

C1608 JB 1A 105K-T

TEESVA 1A 106M8R

C2012 JF 1C 105Z-T C2012 JF 1C 105Z-T

#### [MAIN UNIT]

REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
C664	4030017730	S.CER	ECJ0EB1E471K	В	116/32.7
C665	4510008500	S.ELE	EEE1CA101WP	Т	125.7/43
C666 C667	4030016970 4510008540	S.CER S.ELE	ECJ0EB1C223K EEE1CA100SR	T	106/107.2 106.3/110.4
C668	4030016790	S.CER	ECJ0EB1C103K	В	116.4/37.6
C669	4030017730	S.CER	ECJ0EB1E471K	В	117.2/34
C670 C672	4030016930 4030017460	S.CER S.CER	ECJ0EB1A104K ECJ0EB1E102K	B T	117.3/37.6 99.4/35.6
C673	4030017460	S.CER	ECJ0EB1E102K	В	119.2/98
C674	4030017460	S.CER	ECJ0EB1E102K	T	115.4/41.3
C675 C676	4030017730 4030017460	S.CER S.CER	ECJ0EB1E471K ECJ0EB1E102K	B	117.2/33.1 121/35
C677	4030016930	S.CER	ECJ0EB1A104K	В	72.5/5
C678	4510008540	S.ELE	EEE1CA100SR	В	41.5/10.9
C679 C680	4030016930 4030016930	S.CER S.CER	ECJ0EB1A104K ECJ0EB1A104K	T	125.9/113.4 120.9/107.2
C683	4030017040	S.CER	ECJ0EB1A333K	Ť	113/79.2
C684 C685	4510008540	S.ELE S.ELE	EEE1CA100SR EEE1CA100SR	T	97.2/21.8
C687	4510008540 4510008540	S.ELE	EEE1CA100SR	В	103.3/21.8 64/17.7
C688	4030018900	S.CER	ECJ0EB0J474K	T	128.3/109.6
C689 C691	4030018900 4030017460	S.CER S.CER	ECJ0EB0J474K ECJ0EB1E102K	T B	123.2/110.9 120.6/102.5
C692	4030017400	S.CER	ECJ0EB1A683K	T	114/75.1
C694	4030018900	S.CER	ECJ0EB0J474K	T	126.1/111.3
C695 C697	4510008540 4550007080	S.ELE S.TAN	EEE1CA100SR TEESVA 1C 106M8R	T B	116.8/72.9 75.6/8.4
C698	4030016790	S.CER	ECJ0EB1C103K	T	114.4/70
C700	4510008520	S.ELE	EEE1CA470SP	T	124.2/102.2
C701 C703	4030016930 4510008130	S.CER S.ELE	ECJ0EB1A104K 16 CE 220 BS	B B	67.5/17 123.4/98.6
C704	4030017730	S.CER	ECJ0EB1E471K	T	127.5/114.3
C705	4510008540	S.ELE	EEE1CA100SR	В	69.4/20.3
C706 C707	4510008520 4510008500	S.ELE S.ELE	EEE1CA470SP EEE1CA101WP	T B	125/119.2 121.7/109.1
C708	4030017460	S.CER	ECJ0EB1E102K	В	112.8/32.4
C709	4510008870	S.ELE	EEE1AA471UP	В	112.1/109.1
C710 C711	4030016930 4510008870	S.CER S.ELE	ECJ0EB1A104K EEE1AA471UP	T B	127.2/142.8 104.2/117.2
C712	4030016930	S.CER	ECJ0EB1A104K	T	107.1/145.9
C714	4510008500	S.ELE	EEE1CA101WP	В	114.2/117.2
C716 C717	4030016930 4030017430	S.CER S.CER	ECJ0EB1A104K ECJ0EC1H101J	T	124.2/144.3 59.6/20.7
C718	4510008130	S.ELE	16 CE 220 BS	В	123/117.2
C719 C722	4030017420 4550007080	S.CER S.TAN	ECJ0EC1H470J TEESVA 1C 106M8R	T	119.3/143.3 56.7/16.1
C723	4030017420	S.CER	ECJ0EC1H470J	В	75.7/43.7
C724	4030017420	S.CER	ECJ0EC1H470J	Ţ	82.4/35.4
C725 C726	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	B B	65/48.6 75.9/45.5
C727	4030017420	S.CER	ECJ0EC1H470J	T	79.7/45.5
C728	4030017460	S.CER	ECJ0EB1E102K	В	65/49.5
C729 C730	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	75.7/41.3 78.3/39.4
C731	4030017460	S.CER	ECJ0EB1E102K	В	65.8/47.7
C732	4030017420	S.CER	ECJ0EC1H470J	В	90.5/36
C733 C734	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	68.1/50.7 57.6/43.9
C735	4030017420	S.CER	ECJ0EC1H470J	T	80.2/41.2
C736 C737	4030018860 4030018860		ECJ0EB0J105K ECJ0EB0J105K	B	67.4/45.9 67.4/46.8
C738	4030017360		ECJ0EC1H030B	В	70.3/52
C739	4030017460	S.CER	ECJ0EB1E102K	Ţ	80.7/55.5
C740 C741	4030017460 4030017640		ECJ0EB1E102K ECJ0EC1H150J	B	64.6/46.4 70.3/49.6
C742	4030017570		ECJ0EC1H040B	В	71.5/49.1
C743	4030017680		ECJ0EC1H820J	В	72.7/48.8
C744 C746	4030016790 4030017580		ECJ0EB1C103K ECJ0EC1H060C	B B	72.3/45.5 70.5/45.8
C747	4030017620		ECJ0EC1H100C	В	69/40.9
C748	4030016930		ECJ0EB1A104K	В	65/40.9
C749 C750	4030017460 4030016930		ECJ0EB1E102K ECJ0EB1A104K	B B	64.6/42.1 75.5/48.8
C751	4030017460	S.CER	ECJ0EB1E102K	В	71.3/42.1
C752 C753	4030017420 4030017730		ECJ0EC1H470J ECJ0EB1E471K	B T	74.6/49.7 74.2/48
C753	4030017730		ECJ0EB1E471K ECJ0EB1E471K	Т	74.2/48 75.1/47.3
C755	4030016930	S.CER	ECJ0EB1A104K	Ţ	75.1/44.1
C759 C760	4550000530 4030016930		TEESVA 1V 104M8R ECJ0EB1A104K	T	68.6/37.2 71.5/34.7
C761	4030017460		ECJ0EB1E102K	Ť	74.6/34.2
C762	4550002980		TEESVA 1C 225M8R	Ţ	68.6/34.8
C763 C764	4550000530 4030016930		TEESVA 1V 104M8R ECJ0EB1A104K	T	78.4/34.8 80.2/43.4
C765	4030017460	S.CER	ECJ0EB1E102K	Т	81.3/45.5
C766	4030017460		ECJ0EB1E102K	T	90.6/36
C767 C768	4030017460 4030009570		ECJ0EB1E102K C1608 CH 1H 0R3B-T	T	86.6/35 83/41.4
C769	4030017460	S.CER	ECJ0EB1E102K	Т	87.5/35
C770 C771	4030017460 4030007020		ECJ0EB1E102K C1608 CH 1H 120J-T	T T	84.9/38.5 85.2/42.1
C771	4030007020		C1608 CH 1H 120J-1 C1608 CH 1H 220J-T	¦	85.2/42.1 88.5/40.7
C773	4030007040	S.CER	C1608 CH 1H 180J-T	Т	89.2/38.8
O== :	4030017620		ECJ0EC1H100C ECJ0EC1H100C	T	76.4/49.6 77.6/49.2
C774 C775	14030017620	JU.ULIT	ECJ0EB1E102K	l ¦	
C774 C775 C776	4030017620 4030017460	S.CER	LOUGEDILIOZIC		86.5/57.4
C775 C776 C777	4030017460 4030017340	S.CER	ECJ0EC1H010B	Т	90.3/40.7
C775 C776 C777 C779	4030017460 4030017340 4030017460	S.CER S.CER	ECJ0EC1H010B ECJ0EB1E102K	T T	90.3/40.7 85.2/44.6
C775 C776 C777	4030017460 4030017340	S.CER S.CER S.CER	ECJ0EC1H010B	Т	90.3/40.7
C775 C776 C777 C779 C780 C781 C782	4030017460 4030017340 4030017460 4030017460 4030017460 4030017460	S.CER S.CER S.CER S.CER S.CER	ECJ0EC1H010B ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K	T T T T	90.3/40.7 85.2/44.6 90.3/43.5 84.4/49.2 79.8/57.5
C775 C776 C777 C779 C780 C781	4030017460 4030017340 4030017460 4030017460 4030017460	S.CER S.CER S.CER S.CER S.CER S.CER	ECJ0EC1H010B ECJ0EB1E102K ECJ0EB1E102K ECJ0EB1E102K	T T T	90.3/40.7 85.2/44.6 90.3/43.5 84.4/49.2

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

113.1/118.3

112 9/125 1

112.7/120.

23.1/24.4

19.7/24.5

25.5/24.2

109.6/78.1

110 2/80 7

111.7/79.5

33/20.9

32.2/28

110.1/76.9

28.9/24.8

29.7/23.9

30.5/24.8

110.5/75.7 36.1/24.6

35.3/19.6

62.5/12.8

110.4/96.8 34.9/24

114 8/97 4

65.3/4.4

36.5/26.9

31.6/21.8

114.3/102.

117.1/108

113.5/108.8

89.9/4.9

116.5/104.5

89.9/11.1

61.9/7.5

Т

ВВ

B T

B

В

B

В

Т

T B [MAIN UNIT]

	I UNIT]				I
REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
C786	4030017460	S.CER	ECJ0EB1E102K	T	75.3/55.5
C787 C788	4030017630 4030017460	S.CER S.CER	ECJ0EC1H120J ECJ0EB1E102K	T	83.7/60.9 79.8/55.5
C789	4030017400	S.CER	ECJ0EC1H150J	Ϊ́Τ	85.4/65.4
C790	4030017390	S.CER	ECJ0EC1H180J	Τ	82.5/61.3
C791	4030017600	S.CER	ECJ0EC1H080C	Т	83/62.6
C792	4030017460	S.CER	ECJ0EB1E102K	T	86.3/65.9
C793	4030017340	S.CER S.CER	ECJ0EC1H010B ECJ0EC1H060C	T	88.8/46.6
C794 C795	4030017580 4030017650	S.CER	ECJ0EC1H060C ECJ0EC1H270J	¦	79.7/63.3 85.7/67.4
C796	4030017580	S.CER	ECJ0EC1H060C	<del>†</del>	80.9/63.8
C797	4030017400	S.CER	ECJ0EC1H220J	Т	88.8/48.2
C798	4030017460	S.CER	ECJ0EB1E102K	<u>T</u>	80.4/60.3
C799	4030017580	S.CER	ECJ0EC1H060C	T	79.7/64.2
C800 C803	4030017590 4030017460	S.CER S.CER	ECJ0EC1H070C ECJ0EB1E102K	T	81.9/65.9 90.1/55.2
C804	4030017400	S.CER	ECJ0EC1H150J	Ϊ́Τ	85.7/68.9
C805	4030017460	S.CER	ECJ0EB1E102K	Ť	75.3/58.6
C806	4030017460	S.CER	ECJ0EB1E102K	T	83.3/69.3
C807	4030017590	S.CER	ECJ0EC1H070C	T	81.9/67.5
C808	4030017460 4030017650	S.CER	ECJ0EB1E102K	T	90.7/60.1
C809 C811	4030017650	S.CER S.CER	ECJ0EC1H270J ECJ0EB1E102K	T T	75.7/67 89/60.1
C812	4030017400	S.CER	ECJ0EC1H560J	Ϊ́Τ	77.9/66.7
C814	4030017340	S.CER	ECJ0EC1H010B	ΙĖ	89.8/62.5
C815	4030017460	S.CER	ECJ0EB1E102K	Т	86.2/70.7
C816	4030017650	S.CER	ECJ0EC1H270J	Ţ	79.5/68.7
C817	4030017460	S.CER	ECJ0EB1E102K	T	79.7/67.4
C818 C819	4030017390 4030017460	S.CER S.CER	ECJ0EC1H180J ECJ0EB1E102K	T	90.6/66.3 83.6/55.5
C819 C820	4030017460	S.CER	ECJ0EB1E102K ECJ0EC1H180J	¦	83.6/55.5
C821	4030017390	S.CER	ECJ0EC1H470J	Τ̈́	77.5/61.4
C822	4030017420	S.CER	ECJ0EC1H470J	Т	75.7/66
C823	4030016790	S.CER	ECJ0EB1C103K	T	75.3/62.6
C827	4030017460	S.CER	ECJ0EB1E102K	T	44.5/58
C830	4030017460	S.CER	ECJ0EB1E102K	T	37.5/55.2
C831 C833	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	¦	36.2/59.9 44.4/55.7
C835	4030017460	S.CER	ECJ0EB1E102K	ΙĖΙ	42/59.5
C836	4030006860	S.CER	C1608 JB 1H 102K-T	В	114.3/127.
C837	4030017460	S.CER	ECJ0EB1E102K	T	75.7/70.8
C838	4030017460	S.CER	ECJ0EB1E102K	<u>T</u>	75.1/40.4
C839 C840	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	T	83.1/43.7 46.5/63.1
C841	4030017400	S.CER	ECJ0EC1H070C	Ϊ́Τ	31.7/55.2
C844	4030017460	S.CER	ECJ0EB1E102K	Ť	30.9/57.8
C845	4050000280	S.FED	CTH30V222S15A-TM	Т	87.3/113.6
C846	4050000280	S.FED	CTH30V222S15A-TM	T	43.5/117.5
C847	4050000280	S.FED	CTH30V222S15A-TM	T	119.7/129.
C848 C849	4030017460 4030011810	S.CER S.CER	ECJ0EB1E102K C1608 JB 1A 224K-T	T	19/125.4 93.3/5.5
C850	4030011810	S.CER	C1608 JB 1A 224K-T	<del>†</del>	92.6/4.3
C851	4030011810	S.CER	C1608 JB 1A 224K-T	Т	95.2/4.3
C852	4030011810	S.CER	C1608 JB 1A 224K-T	T	96.8/5.5
C855	4030018140	S.CER	ECJ0EB1H391K	T	61.4/15.6
C856 C857	4030018920 4030017430	S.CER S.CER	ECJ0EB1H392K ECJ0EC1H101J	T	58.6/14.3 71/15.8
C858	4030017430	S.CER	ECJ0EC1H101J	ΙĖΙ	70.9/20
C859	4030017490	S.CER	C1608 JB 1A 105K-T	Ť	75.6/20.4
C860	4030017920	S.CER	ECJ0EB1A683K	T	75.1/19.4
C861	4030018240	S.CER	ECJ0EB1E562K	T	70.4/18.8
C862	4030016950 4030018910	S.CER S.CER	ECJ0EB1A473K	T	72.5/17.9
C863 C864	4030018910	S.CER	C1608 JB 0J 475K-T C1608 JB 0J 475K-T	B B	107.1/36.7 101.1/27.5
C865	4030018910	S.CER	C1608 JB 0J 475K-T	В	104.2/37.8
C866	4030017040	S.CER	ECJ0EB1A333K	T	64.4/23.1
C867	4030018860	S.CER	ECJ0EB0J105K	В	101.7/31.2
C868	4030016790	S.CER	ECJ0EB1C103K	T	66.9/92.4
C869	4030016790 4030016790	S.CER S.CER	ECJ0EB1C103K ECJ0EB1C103K	T	66.9/89.3
C870 C871	4030016790	S.CER	ECJ0EB1C103K ECJ0EB1C103K	¦	17.5/92.6 17.5/90.4
C872	4550007080	S.TAN	TEESVA 1C 106M8R	Τ̈́	56.7/18.2
C873	4030018860	S.CER	ECJ0EB0J105K	Т	102.2/30.1
C874	4510008540	S.ELE	EEE1CA100SR	В	64.2/22.5
C875	4510008540	S.ELE	EEE1CA100SR	В	52.2/26.8 64.2/27.3
C876 C877	4510008540 4510009120	S.ELE S.ELE	EEE1CA100SR EEE1VA2R2NR	B B	64.2/27.3 44.1/36
C877 C879	4510009120	S.ELE	EEE1CA100SR	В	58.3/22
C882	4030017460	S.CER	ECJ0EB1E102K	В	105.6/101.
C883	4030017460	S.CER	ECJ0EB1E102K	T	90.9/93.9
C884	4030016930	S.CER	ECJ0EB1A104K	T	8.2/66
C889 C891	4030017460 4030016930	S.CER S.CER	ECJ0EB1E102K ECJ0EB1A104K	T	16.7/60.4 17.3/53.2
C894	4030016930	S.CER	ECJ0EB1A104K ECJ0EB1C103K	T T	62.5/50.2
C895	4030017460	S.CER	ECJ0EB1E102K	Τ̈́	29.6/111.8
C896	4030017460	S.CER	ECJ0EB1E102K	В	47.2/58.7
C897	4030017460	S.CER	ECJ0EB1E102K	В	5.6/33.6
C898	4030016930	S.CER	ECJ0EB1A104K	T	93.4/14.2
C899 C900	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	128.3/77.5 126.7/78
C900 C901	4030017400	S.CER	ECJ0EC1H470J	В	123.4/55.1
C902	4030017420	S.CER	ECJ0EC1H470J	В	123.4/51.9
C903	4030016930	S.CER	ECJ0EB1A104K	Т	119.1/53.1
C904	4030016930	S.CER	ECJ0EB1A104K	Ţ	121.2/55.2
C905	4030016930	S.CER	ECJ0EB1A104K	T	103.2/53.9
C906 C907	4030016930 4030016790	S.CER S.CER	ECJ0EB1A104K ECJ0EB1C103K	T B	103.2/54.8 114/56.2
C907 C908	4030016790	S.CER	ECJ0EB1C103K ECJ0EB1E102K	T	108/52.5
	4030017460	S.CER	ECJ0EB1E102K	Τ̈́	114.6/51.8
C909 C910	4030016790	S.CER	ECJ0EB1C103K	<u>T</u>	
C909 C910 C911	4030016790 4030016930	S.CER	ECJ0EB1A104K	Т	111.7/53.7
C909 C910	4030016790				114.6/50.9 111.7/53.7 59.9/28.2 114.3/98.8

[MAIN UNIT]

	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
	4030016930	S.CER	ECJ0EB1A104K	В	125.8/79.4
	4030016930	S.CER	ECJ0EB1A104K	В	121.3/83.4
	4030016930 4030016930	S.CER	ECJ0EB1A104K	B	115.4/89.4
	4030016930	S.CER S.CER	ECJ0EB1A104K ECJ0EB1E102K	¦	69.3/25 101.3/25.9
	4030017460	S.CER	ECJ0EB1E102K	B	69.7/37.1
	4030017460	S.CER	ECJ0EB1E102K	В	71.2/34.2
	4030017460	S.CER	ECJ0EB1E102K	В	29.8/32.7
	4030017460 4030017460	S.CER S.CER	ECJ0EB1E102K ECJ0EB1E102K	B	30.7/36.2 23.2/36.6
	4030017460	S.CER	ECJ0EB1E102K	В	67.2/36.9
C926	4030016930	S.CER	ECJ0EB1A104K	Т	15.8/58.6
	4030016930	S.CER	ECJ0EB1A104K	T	7.6/55.4
	4030016930 4030016930	S.CER S.CER	ECJ0EB1A104K ECJ0EB1A104K	T	15.8/51 7.6/47.9
	4030016930	S.CER	ECJ0EB1A104K	Τ̈́	61/59.5
C931	4030016930	S.CER	ECJ0EB1A104K	Т	61.6/52
	4030016930	S.CER	ECJ0EB1A104K	T	52.9/56.3
	4030016930 4030016930	S.CER S.CER	ECJ0EB1A104K ECJ0EB1A104K	T	52.9/48.8 122.5/71.2
	4030017460	S.CER	ECJ0EB1E102K	Ť	30.2/109
	4030017460	S.CER	ECJ0EB1E102K	Т	33/107.9
	4030017460	S.CER	ECJ0EB1E102K	T	71.1/137.5
	4030017460 4030018900	S.CER S.CER	ECJ0EB1E102K ECJ0EB0J474K	T B	54/124 122.4/82.8
	4030016790	S.CER	ECJ0EB1C103K	T	121.7/27.7
	4030017520	S.CER	ECJ0EC1H0R3B	Ť	38.4/37
	4030017460	S.CER	ECJ0EB1E102K	Т	51.9/124.2
	4510009010	S.ELE	EEE1AA221P	T	86.4/16.8
2 1 1	4030017460 4030017400	S.CER S.CER	ECJ0EB1E102K ECJ0EC1H220J	B	46.8/30.5 89.7/49.1
	4030018890	S.CER	ECJ0EB0J224K	Ť	76/47.7
	4030017570	S.CER	ECJ0EC1H040B	Т	36.4/137.1
	4030017360	S.CER	ECJ0EC1H030B	T	37.7/136.7
C954	4510009010	S.ELE	EEE1AA221P [EUR-02] only	Т	13.2/36.6
RL1	6330001560	S.RLY	ATQ206SA	Т	27.3/119.6
	6330001560	S.RLY	ATQ2003A ATQ206SA	Ť	64.7/122.9
RL3	6330001560	S.RLY	ATQ206SA	Т	24.7/144.8
	6510014961	S.CNR	B2B-ZR-SM4-TF (LF) (SN)	Т	48.3/136.1
	6510023110	CNR	3008L-8P8C <kin></kin>		
	6510025950	CNR	PCB-606 (6P6C) BLACK		
	6510023161 6450001430	CNR	DN-508B-6-L <kou> HSJ1462-01-010</kou>		
J6	6510021970		AXN330C130P	В	123.5/35.9
	6510014961	S.CNR	B2B-ZR-SM4-TF (LF) (SN)	В	101/108.4
	6510025940	CNR	PJ-3047S <xin> HSJ1403-01-010</xin>		
	6450001440 6510025970	S.CNR	41-002AA-R <mrf></mrf>	Т	94.8/112.6
	6510025970	S.CNR	41-002AA-R <mrf></mrf>	Ť	39.7/123.2
J22	6510025970	S.CNR	41-002AA-R <mrf></mrf>	T	94.8/117
	6510025970 6510016381	S.CNR S.CNR	41-002AA-R <mrf> 52465-1071</mrf>	T	36.5/119.6 126.3/67.5
.				-	
W1	8900016070	CBL	OPC-1669		
	8900016070		OPC-1669		
	7120000470		ERDS2T0		
	7120000470 8900016020	JMP CBL	ERDS2T0 OPC-1671 <tjm></tjm>		
EP1	6910014690	S.BEA	MPZ1608S221A-T	Т	49.3/117.4
	6910014690	S.BEA	MPZ1608S221A-T	Ť	51.1/133.4
	6910012350		MMZ1608Y 102BT	В	44.3/88.7
	6910012350	S.BEA	MMZ1608Y 102BT	B	39.4/88.2
	6910012350 6910018460	S.BEA S.BEA	MMZ1608Y 102BT MMZ1005Y102C-T	¦	8.9/17.2 8/22.9
	6910018460	S.BEA	MMZ1005Y102C-T	Ť	10.9/17.7
	6910018460		MMZ1005Y102C-T	T	12.4/25
	6910018460		MMZ1005Y102C-T	T	16/25.3
	6910018460 6910012350	S.BEA S.BEA	MMZ1005Y102C-T MMZ1608Y 102BT	T	13.9/25.3 15/17.2
	6910012350		MMZ1005Y102C-T	¦	18.2/21.6
	6910012350	S.BEA	MMZ1608Y 102BT	Ť	125.9/19.6
	6910012350		MMZ1608Y 102BT	Т	120.2/21.7
	6910018460	S.BEA	MMZ1005Y102C-T	T	122.9/22.5
	6910018460	S.BEA	MMZ1005Y102C-T	В	121.6/94
	6910018460 6910018460	S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T	B B	123.7/81.5 125.7/80.6
	6910018460	S.BEA	MMZ1005Y102C-T	T	12.9/28.9
EP24	6910018460	S.BEA	MMZ1005Y102C-T	T	57.1/9.6
EP25	6910018460		MMZ1005Y102C-T	B B	127.7/32.3
	6910018460 6910018460	S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T	В	119.2/41.6 119.2/40.7
EP26	6910018460	S.BEA	MMZ1005Y102C-T	В	119.2/39.4
EP26 EP27 EP29		S.BEA S.BEA	MMZ1005Y102C-T	В	127.7/39.5
EP26 EP27 EP29 EP30	6910018460		MMZ1005Y102C-T	T	89.4/9.8
EP26 EP27 EP29 EP30 EP31	6910018460	S.BEA	WINE 1003 1 102C-1	T	89/4.9
EP26 EP27 EP29 EP30 EP31 EP32			MMZ1005Y102C-T MMZ1005Y102C-T	В	89/4.9 127.7/42.2
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34	6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T	B B	127.7/42.2 127.7/41.3
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34 EP35	6910018460 6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T	B B B	127.7/42.2 127.7/41.3 127.7/31.4
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34 EP35 EP36	6910018460 6910018460 6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T	B B B	127.7/42.2 127.7/41.3 127.7/31.4 127.7/40.4
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34 EP35 EP36 EP37	6910018460 6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T	B B B	127.7/42.2 127.7/41.3 127.7/31.4
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34 EP35 EP36 EP36 EP37 EP38 EP39	6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T	B B B T B B	127.7/42.2 127.7/41.3 127.7/31.4 127.7/40.4 89.5/1.7 127.7/38.6 127.7/37.7
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34 EP35 EP36 EP36 EP37 EP38 EP38 EP39 EP40	6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T	B B B T B B B	127.7/42.2 127.7/41.3 127.7/31.4 127.7/40.4 89.5/1.7 127.7/38.6 127.7/37.7 127.7/36.8
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34 EP35 EP36 EP37 EP38 EP39 EP40 EP41	6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA	MMZ1005Y102C-T	B B B B B B B B	127.7/42.2 127.7/41.3 127.7/31.4 127.7/40.4 89.5/1.7 127.7/38.6 127.7/37.7 127.7/36.8 127.7/34.1
EP26 EP27 EP29 EP30 EP31 EP32 EP33 EP34 EP35 EP36 EP37 EP38 EP39 EP40 EP41 EP42	6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460 6910018460	S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA S.BEA	MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T MMZ1005Y102C-T	B B B T B B B	127.7/42.2 127.7/41.3 127.7/31.4 127.7/40.4 89.5/1.7 127.7/38.6 127.7/37.7 127.7/36.8

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side)
S.=Surface mount

#### [MAIN UNIT]

REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
EP48	6910018460	S.BEA	MMZ1005Y102C-T	Т	91/61.3
EP49	6910014690	S.BEA	MPZ1608S221A-T	T	121.3/152.3
EP50	6910014690	S.BEA	MPZ1608S221A-T	T	109.4/155.1
EP51	6910018460	S.BEA	MMZ1005Y102C-T	T	119.3/144.2
EP52	6910014690	S.BEA	MPZ1608S221A-T	T	128.6/143.6
EP53	6910014690	S.BEA	MPZ1608S221A-T	T	126.3/144.3
EP54	6910014690	S.BEA	MPZ1608S221A-T	T	113.9/138.9
EP55	6910014690	S.BEA	MPZ1608S221A-T	T	108.6/147.8
EP56	6910018460	S.BEA	MMZ1005Y102C-T	В	119.3/38.5
EP57	6910018460	S.BEA	MMZ1005Y102C-T	В	119.3/37.6
EP58	6910018460	S.BEA	MMZ1005Y102C-T	В	119.3/36.7
EP59	6910014690	S.BEA	MPZ1608S221A-T	В	117.2/36.3
EP60	6910014690	S.BEA	MPZ1608S221A-T	В	117.2/35.1
EP61	6910018460	S.BEA	MMZ1005Y102C-T	В	119.3/34.3
EP62	6910018460	S.BEA	MMZ1005Y102C-T	В	119.3/33.4
EP63	6910018460	S.BEA	MMZ1005Y102C-T	В	119.3/32.5
EP64	6910018460	S.BEA	MMZ1005Y102C-T	В	119.3/31.6
EP66	6910018460	S.BEA	MMZ1005Y102C-T	В	127.7/35
EP68	6910018460	S.BEA	MMZ1005Y102C-T	В	41.6/14.3
EP69	6910018460	S.BEA	MMZ1005Y102C-T	T	52.6/10.4
EP70	6910018460	S.BEA	MMZ1005Y102C-T	T	45/8
EP71	6910012350	S.BEA	MMZ1608Y 102BT	T	47.5/130.7

## [VR1 UNIT]

REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
R1	7210003250	VAR	RV-320 (RK097221005H)		
W1	8900016030	CBL	OPC-1666 <tjm></tjm>		

#### [VR2 UNIT]

REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
R1	7210003250	VAR	RV-320 (RK097221005H)		
W1	8900016030	CBL	OPC-1666 <tjm></tjm>		

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

## **SECTION 7**

## **MECHANICAL PARTS**

#### [CHASSIS PARTS]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510004880	MR-DSE-01	1
J2	6510004880	MR-DSE-01	1
P1	6510009580	ZHR-2	1
SP1	2510001160	057P0802	1
MF1	2710000820	EFB0412VHD-6P38	1
W1	9016420020	23/04/140/B09/W01	1
W2	9016420010	23/00/140/B09/W01	1
MP1	8010020640	2969 CHASSIS	1
MP2	8210023550	2969 CHASSIS PANEL	1
MP3	8310068650	2969 MAGNET PLATE	1
MP5	8110009000	2969 U-COVER	1
MP6	8110009010	2969 L-COVER	1
MP7	8110009020	2969 FAN COVER	1
MP8	8930071460	2969 SP SPONGE	1
MP9	8930071380	2969 IC CLIP	1
MP10	8810009611	Screw M2.6X6 ZK3	17
MP12	8810008661	Screw BT B0 3X8 NI-ZC3 (BT)	11
MP13	8810008661	Screw BT B0 3X8 NI-ZC3 (BT)	4
MP14	8810008661	Screw BT B0 3X8 NI-ZC3 (BT)	4
MP15	8810009991	Screw BT B0 3X8 NI-ZK3 (BT)	5
MP16	8810010141	Screw PH M3X30 ZK3	4
MP18	8930014980	59 saran net	1
MP19	8930072260		1
MP20	8930071590	THERMALLY SHEET (BI)	1
MP36	8930016800	Thermal sheet (U)	1
MP38	8930041160	Sheet (BO)	1
MP39	8930018810	Sheet (AA)	1

#### [MAIN UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J2	6510023110	3008L-8P8C	1
J3		PCB-606 (6P6C)	1
J4	6510023161	DN-508B-6-L	1
J5		HSJ1462-01-010	1
J8	6510025940		1
J9	6450001440	HSJ1403-01-010	1
W1	8900016070	OPC-1669	1
W2	8900016070		1
W5	7120000470		1
W6	7120000470		1
W7	8900016020	OPC-1671	1
MP2*	8510018150	2969 B-VCO CASE	1
MP3*	8510014940	2601 VCO CASE	1
MP4*	8510018150	2969 B-VCO CASE	1
MP5*		2601 VCO CASE	1
MP6*		2775 VCO CASE	1
MP7*		2775 VCO CASE	1
MP8*		2969 S-VCO CASE	1
MP9*		2969 S-VCO CASE	1
MP10		2969 B-VCO COVER	2
MP11		2601 VCO COVER	2
MP12		2775 VCO COVER	2
MP13		2775 VCO COVER	2
MP14		2633 M-SHEET	2
MP15	8930059770	2633 M-HOLDER	2
MP16	8930073170	SPONGE(JQ)	1
MP17	8930073180	SPONGE(JR)	1

<sup>\*:</sup> Refer to SECTION 8 BOARD LAYOUTS.

#### [CONTROL UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J5	6510025730	HJC0187-010024	1
DS1	5030003040	M6-0103TRM-5	1
S15	2250000570		1
S16	2250000570	SW-169	1
MP1	8210023490	2969 FRONT PANEL (Inc. MP19)	1
MP2	8210023500	2969 REAR PANEL (Inc. MP25)	1
MP3	8310068770	2969 WINDOW PLATE(A)	1
MP4	8310068550	2969 WINDOW LINE	1
MP5	8310068560	2969 SUB RING	2
MP6	8310068570	2969 MAIN RING	2
MP7	8610013060	KNOB K-263	1
MP8	8610013070	KNOB K-263 (A)	1
MP9	8610013030	KNOB N-353	2
MP10	8610013040	KNOB N-354	2
MP11	8610013050	KNOB N-355	2
MP12		2969 KNOB PLATE	2
MP13		KNOB K-229	2
MP14		KNOB K-229 (J)	2
MP15		KNOB K-229 (K)	1
MP16		KNOB K-229 (L)	1
MP17		KNOB K-229 (M)	1
MP18		2969 REFLECTOR	1
MP19		2969 WINDOW SHEET	1
MP20		2969 KEY SPONGE	1
MP21		2969 KEY SHEET	1
MP23		Push spring (F)	2
MP25		Bit insert SB-264540-CD	2
MP26		Knob spring NO.7800	2
MP27		Knob spring NO.6601	2
MP28		HEX NUT (A)	2
MP29	8810009221	Screw BT B0 2X8 NI-ZK3 (BT)	8
MP40		2969 LCD PLATE	1
MP41		2969 LCD FILTER	1
MP42		2969 LCD SHEET	1
MP44	8930072050	2969 RBEF SHEET	1

#### [VR1 UNIT]

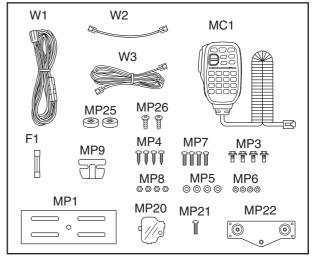
REF NO.	ORDER NO.	DESCRIPTION	QTY.
R1	7210003250	RV-320	1
W1	8900016030	OPC-1666	1

#### [VR2 UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
R1	7210003250	RV-320	1
$I_{W1}$	8900016030	OPC-1666	1

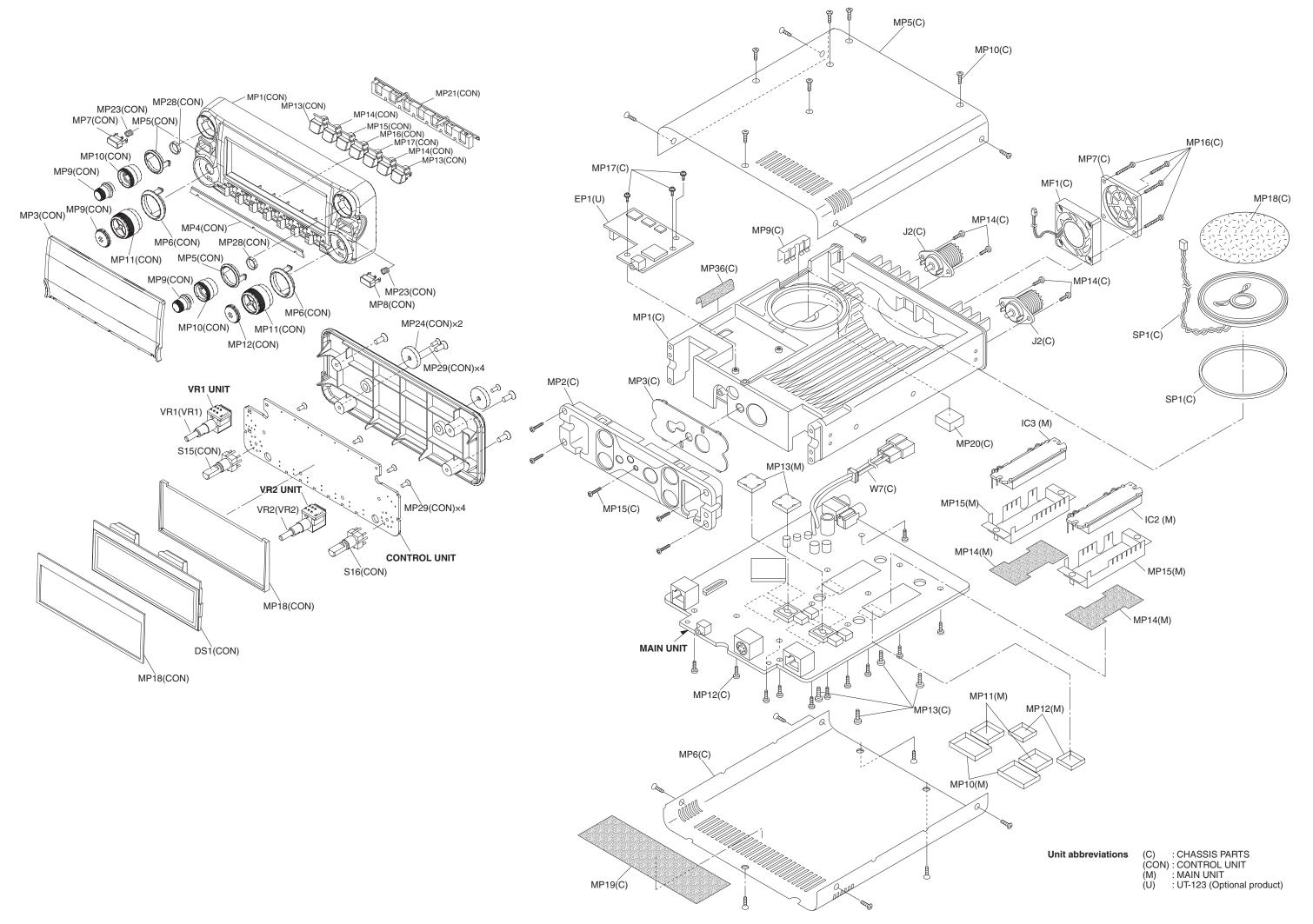
#### [ACCESSORIES]

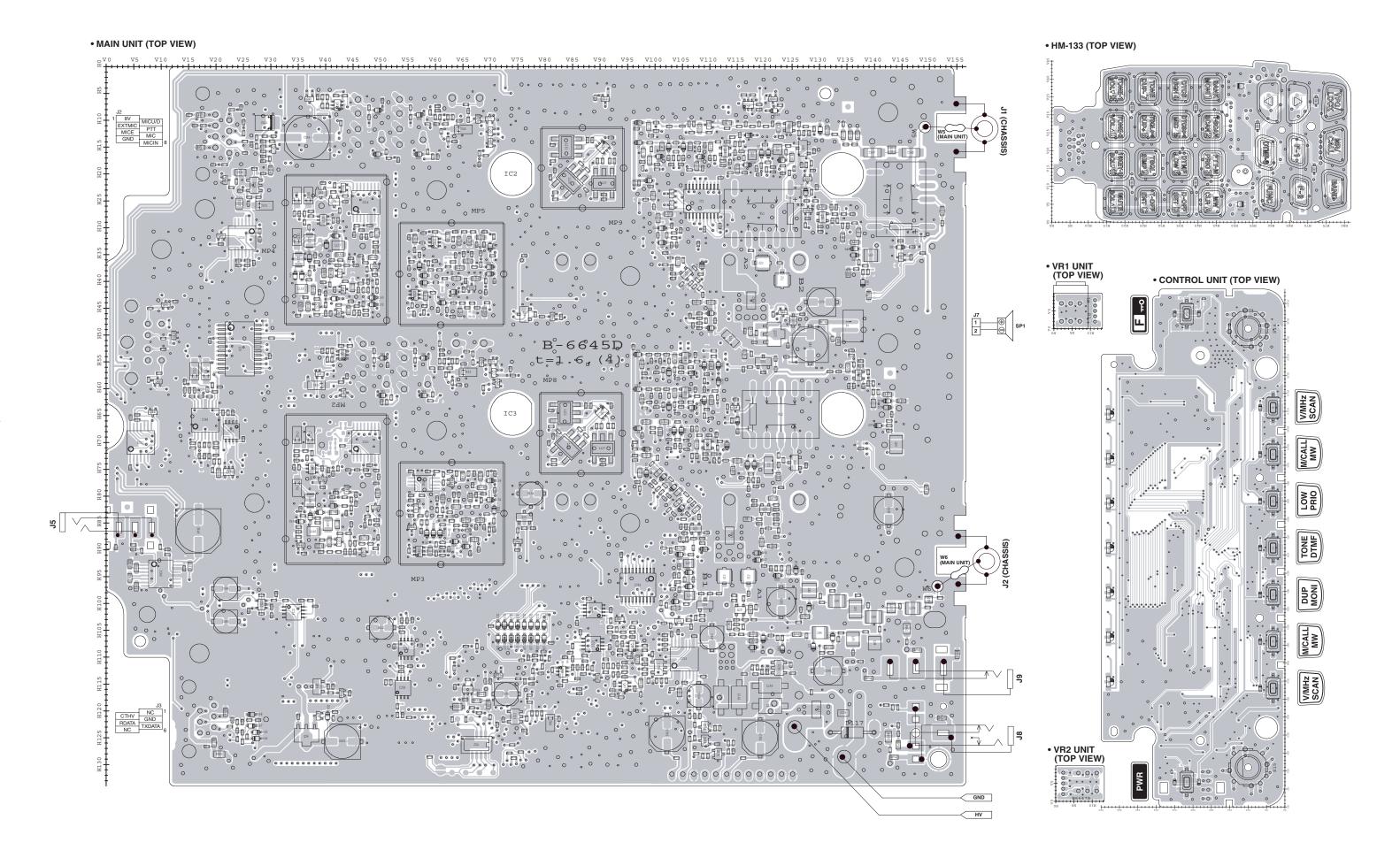
REF NO.	ORDER NO.	DESCRIPTION	QTY.
MC1	Option	HM-133	1
F1	5210000080	FGB 20A	1
W1 W2 W3	Option 8900016370 8900016050		1 1 1
MP1 MP2 MP3 MP4 MP5 MP6 MP7 MP8 MP9 MP20 MP21 MP22 MP25 MP25	8930041170 8820000530 8810000951 8850000180 8850000500 8810000471 8830000250 8930007300 8310068640 8810009611 8010020830	150 MOBIL BRACKET (SI) 452 FELT (SI) Flange bolt M4X8 NI Screw BT A0 5X16 ZC3 Flat washer M5 SUS S-washer M5 SUS Screw PH (+-) M5X12 ZC3 Nut M5 SUS MIC hanger 2969 CHASSIS PLATE Screw M2.6X6 ZK3 2969 BRACKET (Inc. MP2) NDRDY-15060304 Screw M2.6X6 ZK3	1 2 4 4 4 4 4 1 1 1 2 2

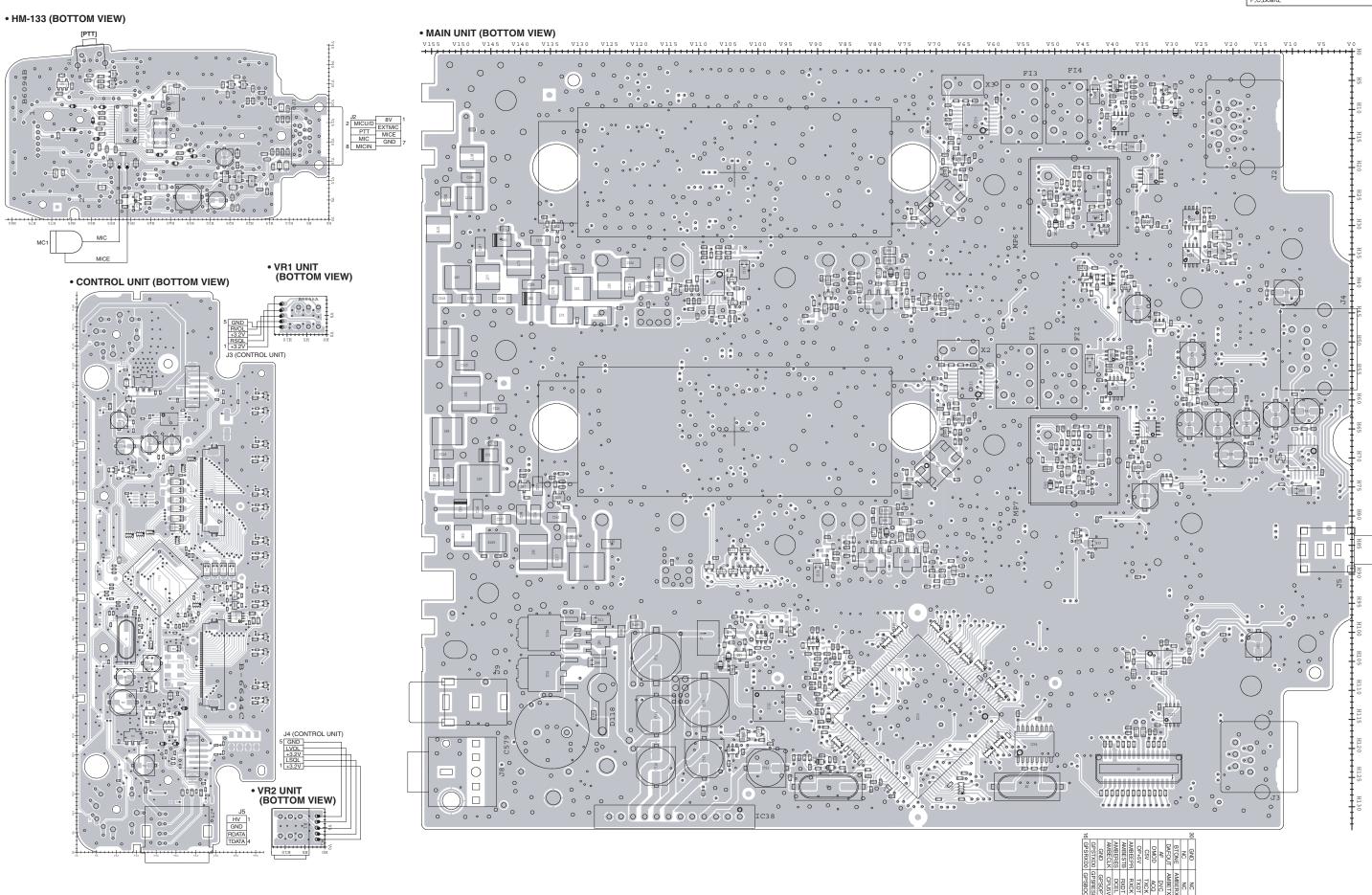


**Screw abbreviations** 

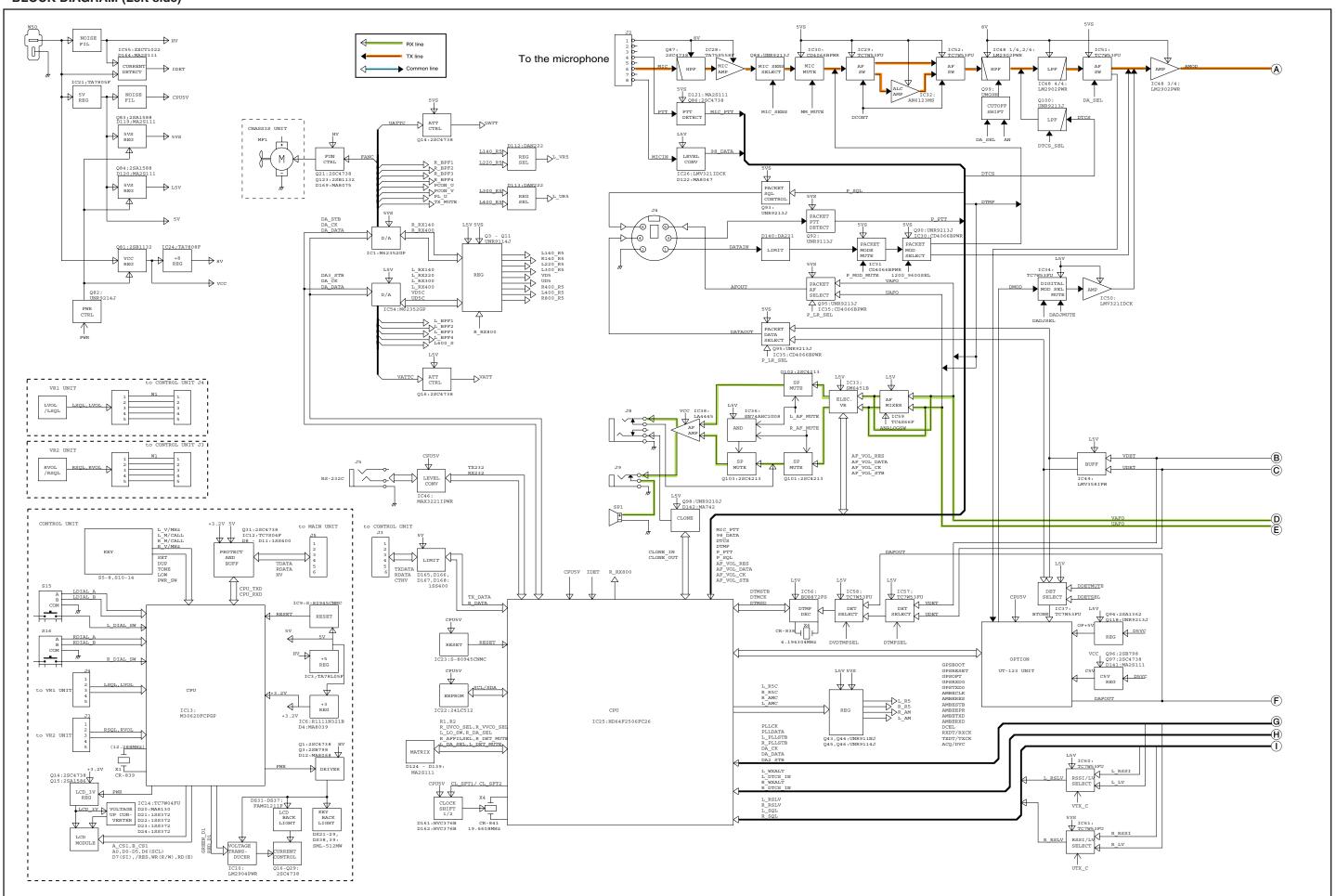
A, B0, BT: Self-tapping PH: Pan head ZK: Black NI-ZU: Nickel-Zinc SUS: Stainless



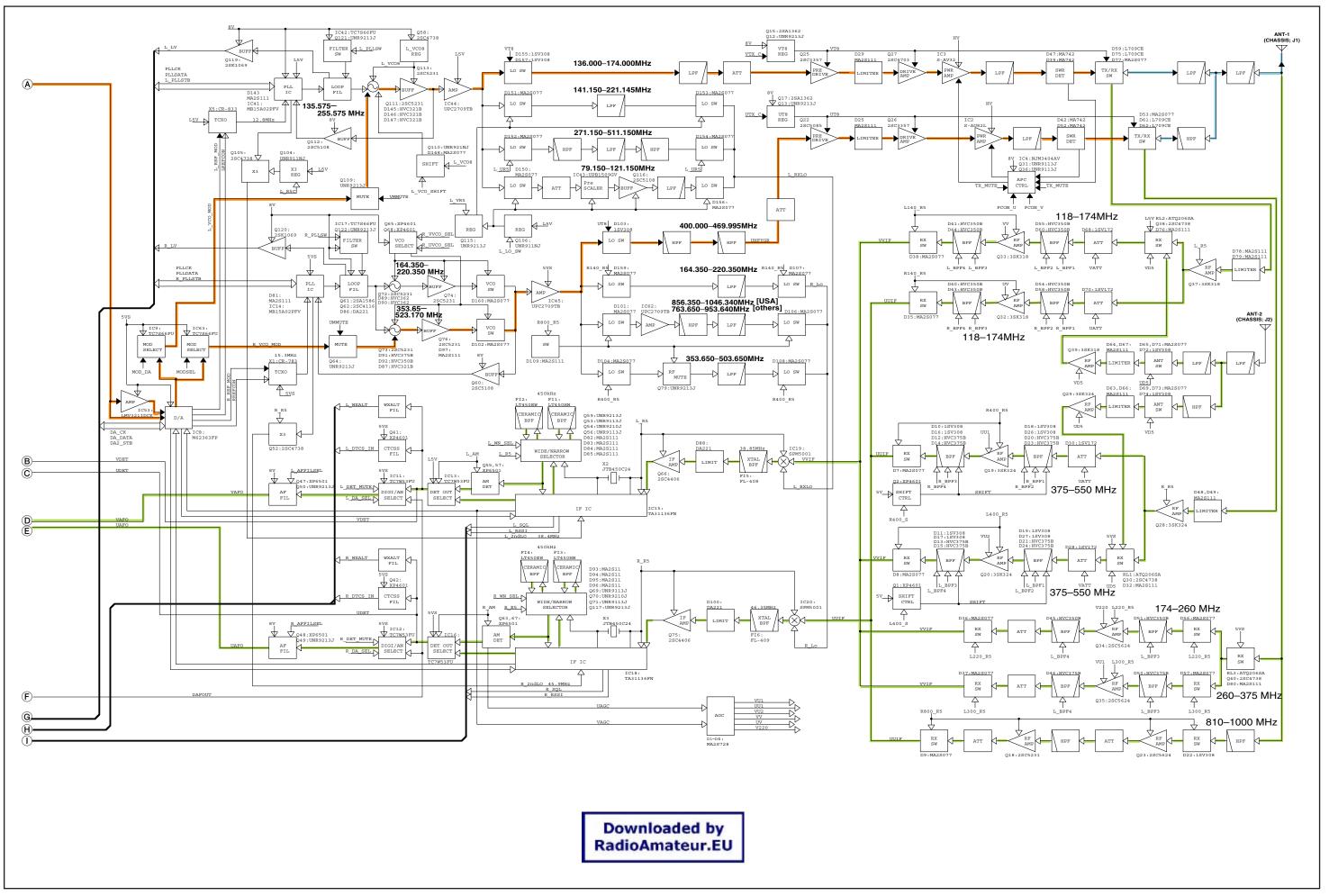




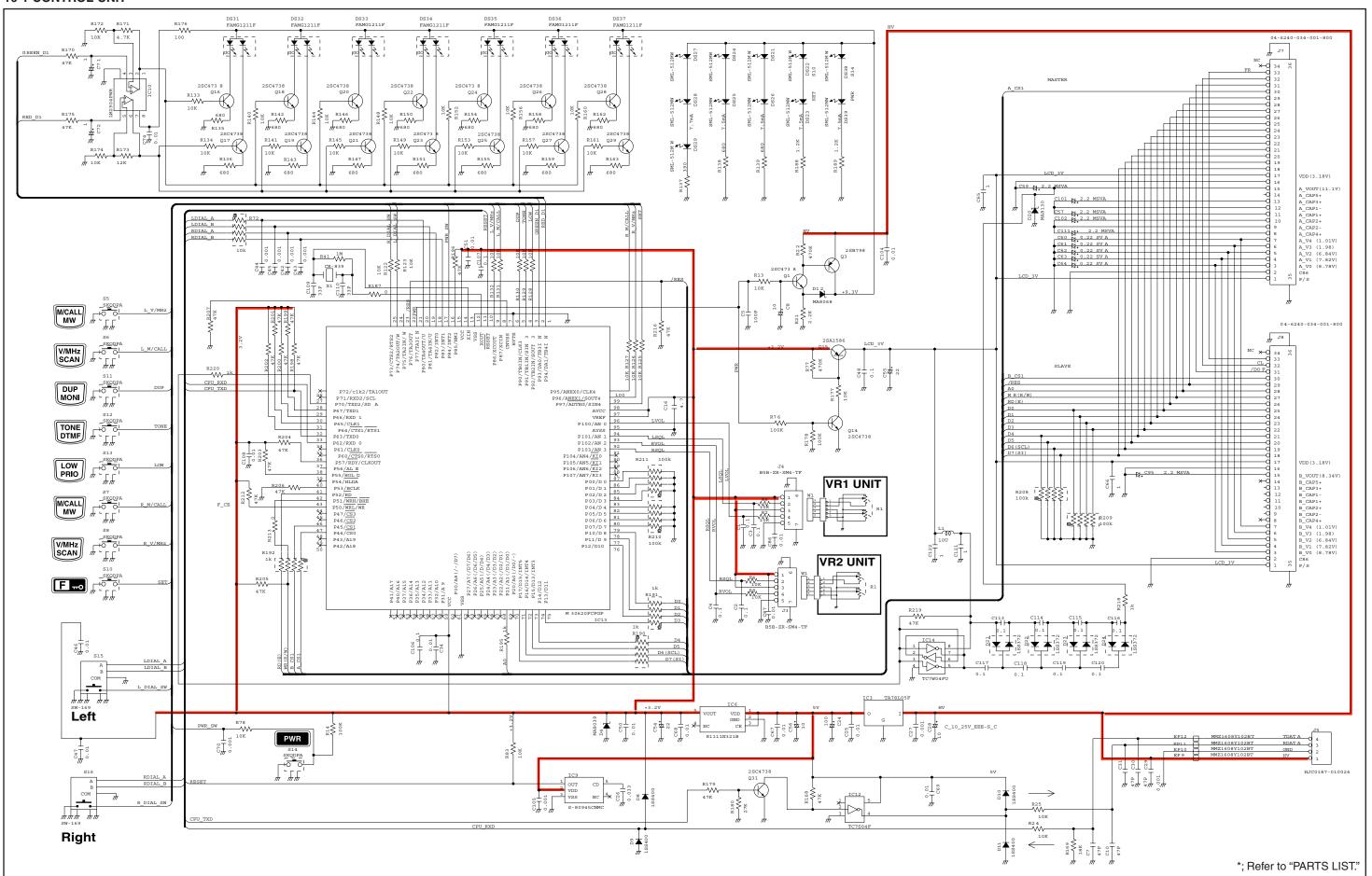
#### • BLOCK DIAGRAM (Left side)



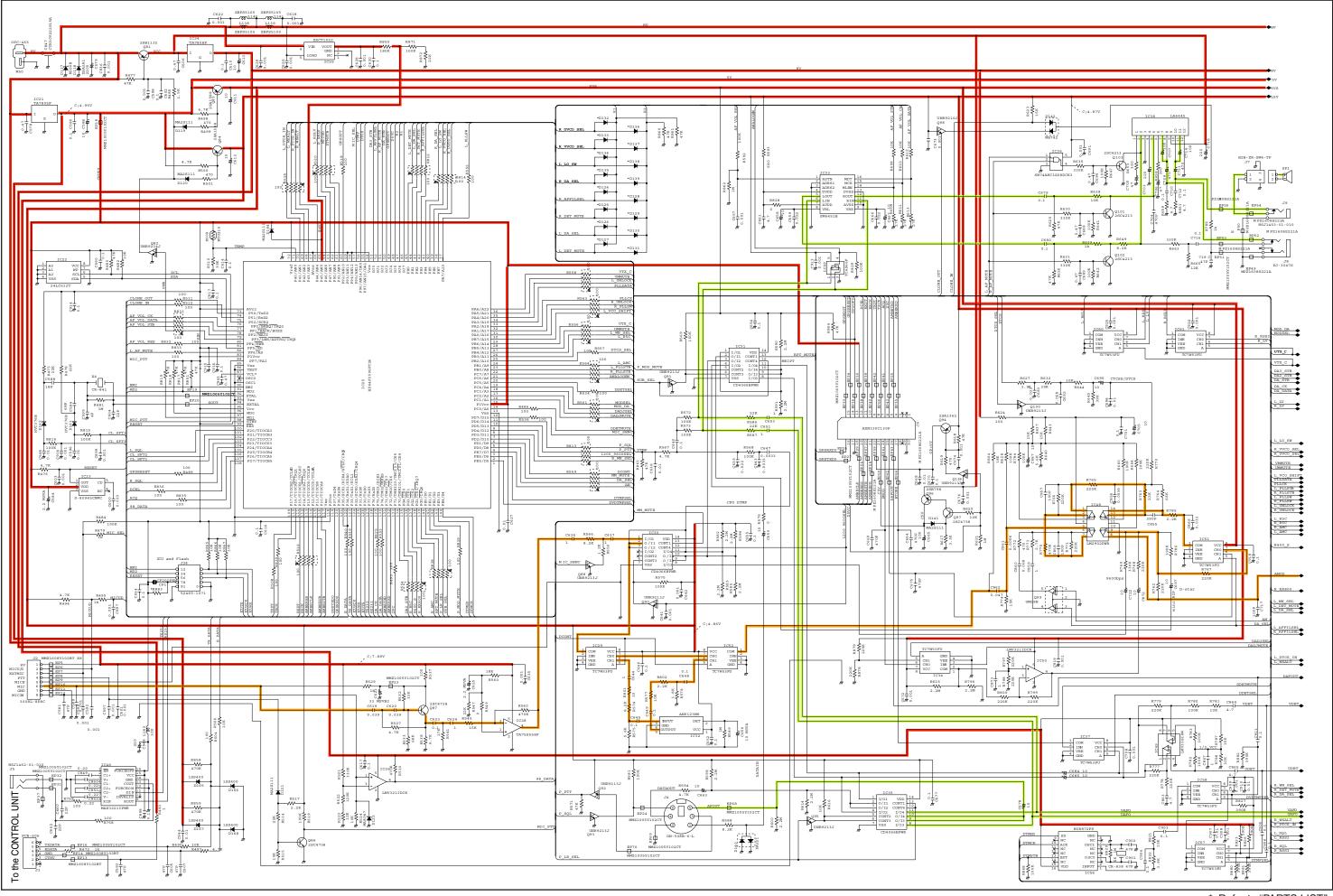
#### • BLOCK DIAGRAM (Right side)



#### **10-1 CONTROL UNIT**

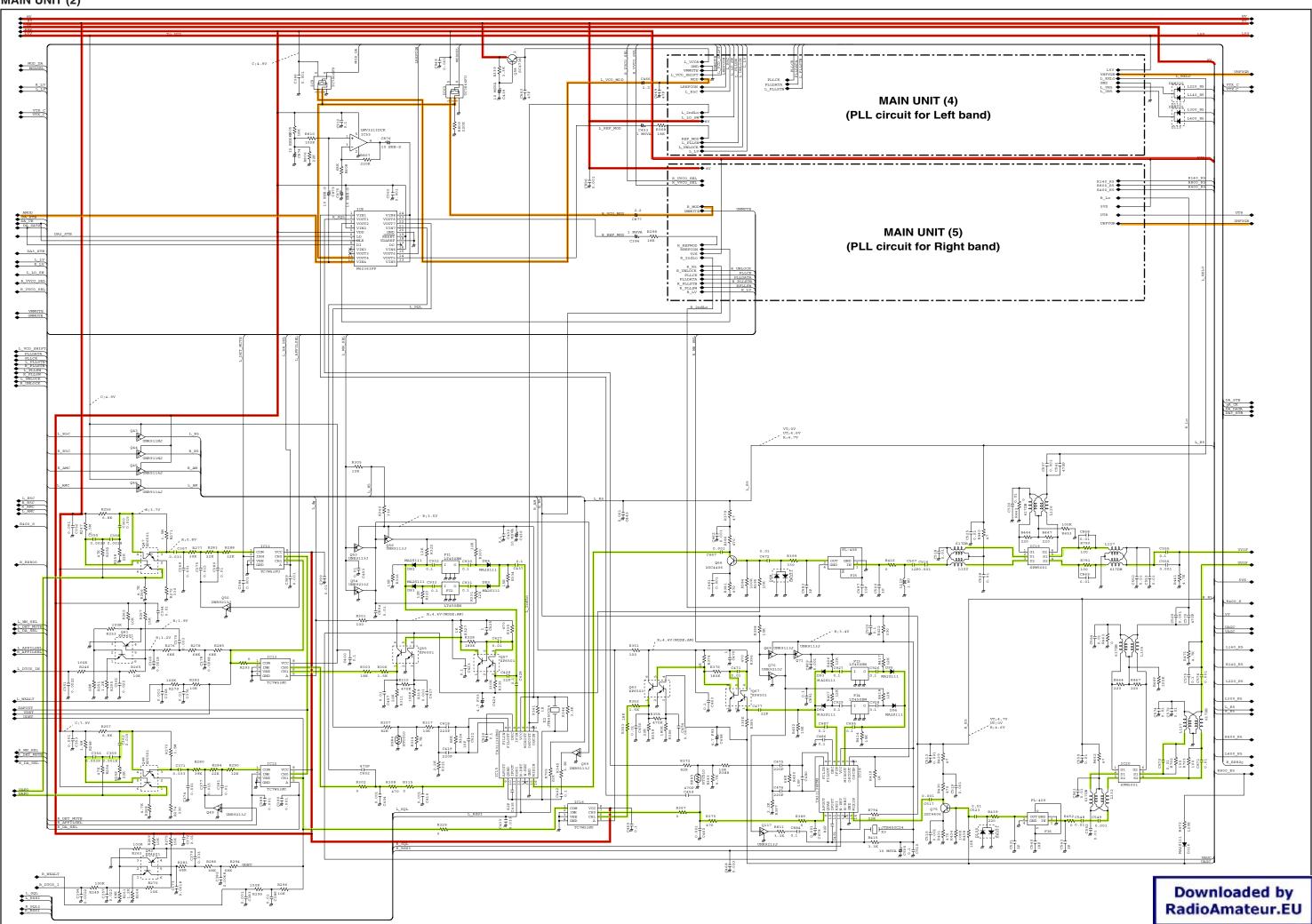


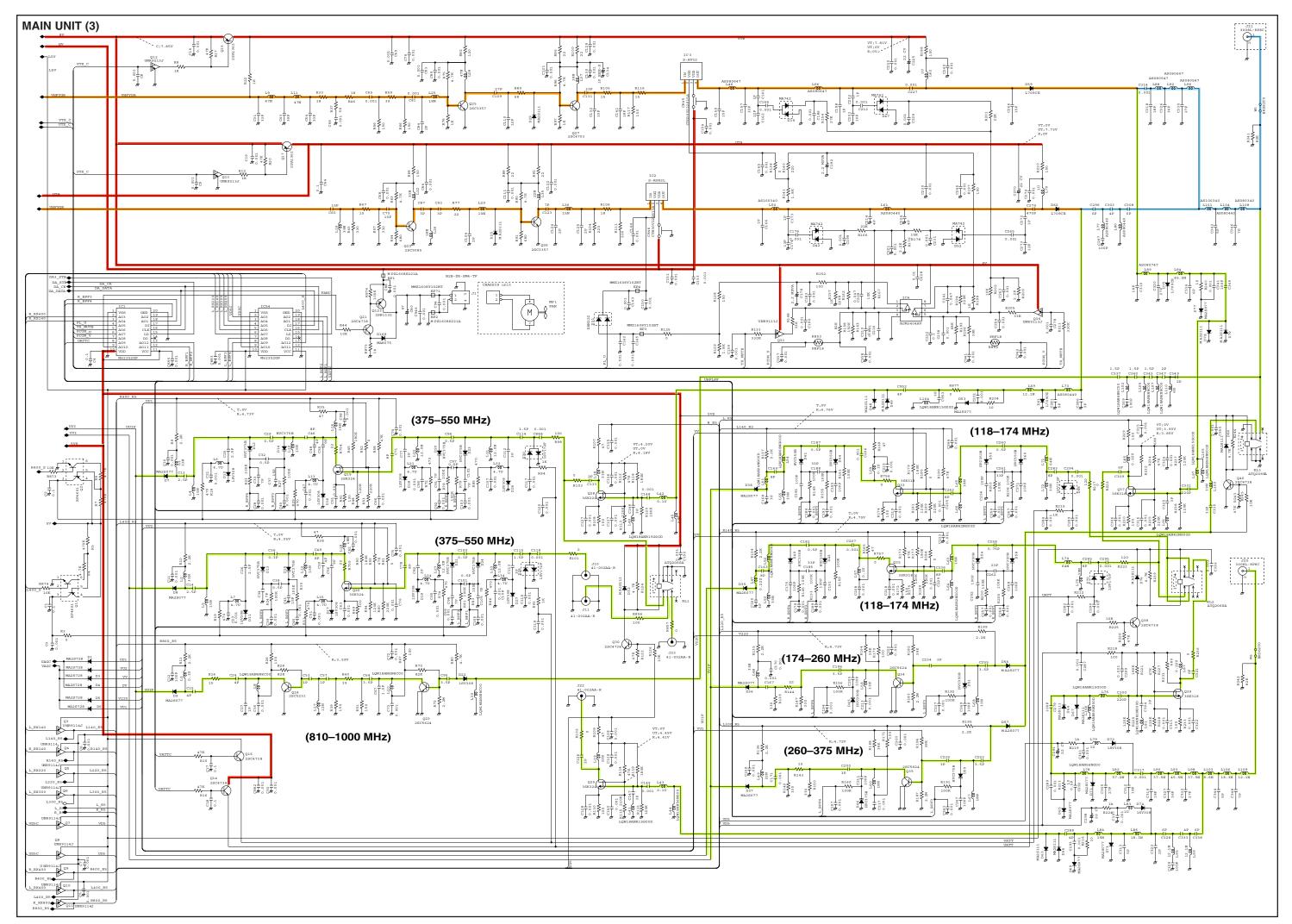
#### 10-2 MAIN UNIT (1)



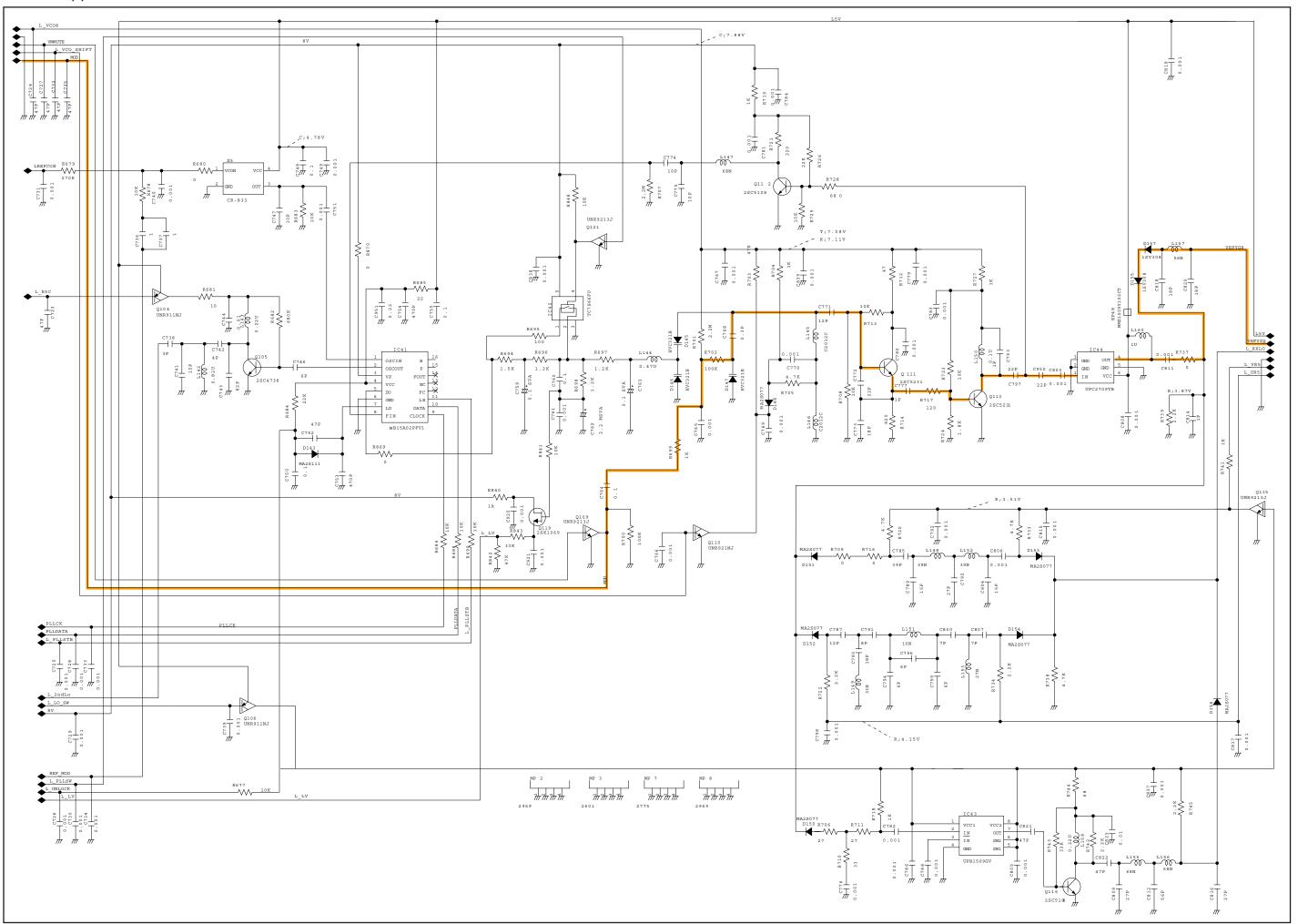
\*; Refer to "PARTS LIST."

#### MAIN UNIT (2)

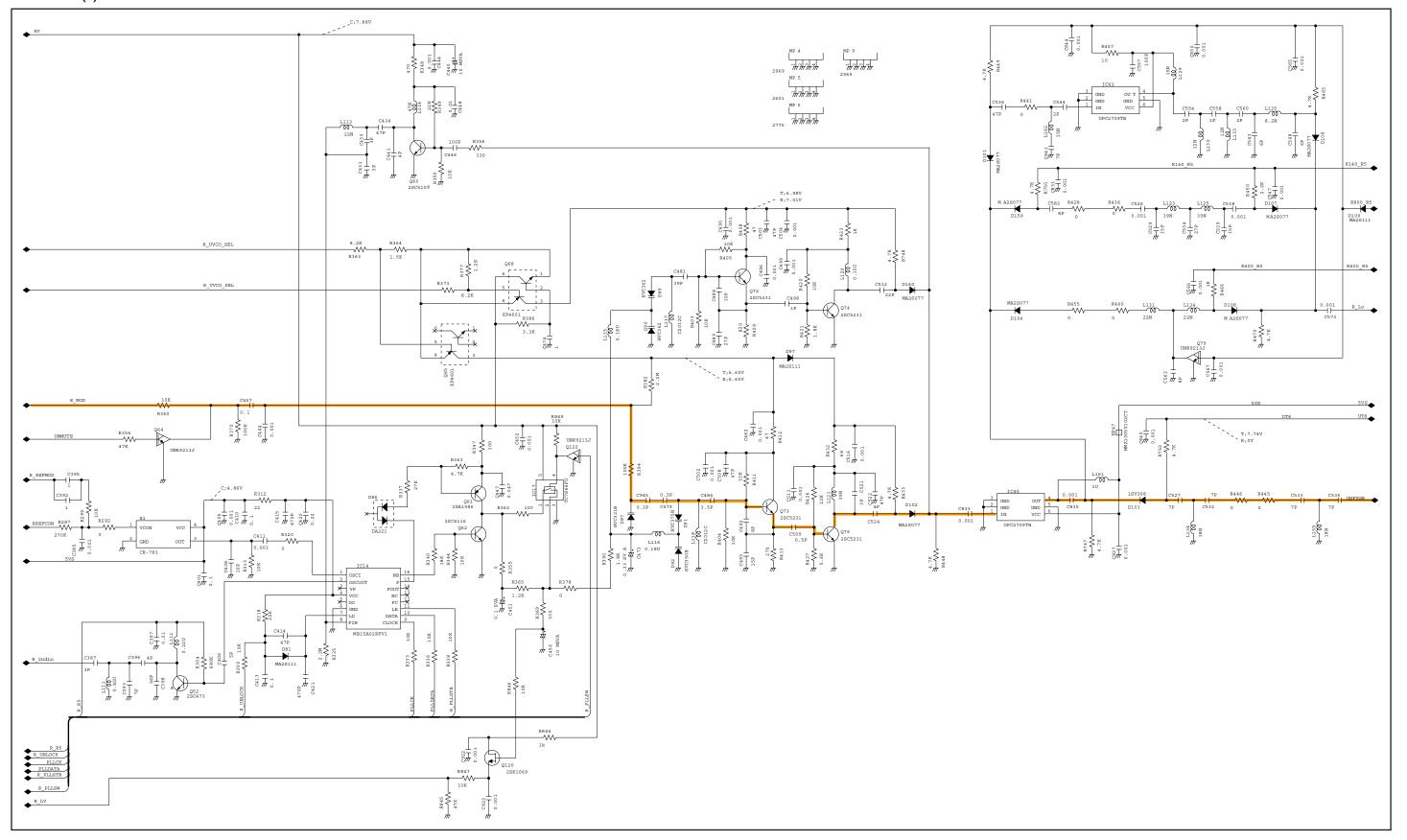




#### MAIN UNIT (4)



## MAIN UNIT (5)



## HM-133

#### • ELECTRICAL PARTS

[MAIN-A UNIT]

	IN-A UNIT	ı			
REF NO.			DESCRIPTION	М.	H/V LOCATION
IC1 IC3 IC6	1140011491 1110006310 1130012030	S.IC S.IC S.IC	uPD789071MC-041-5A4-E1-A BD5245G-TR BR24L02FV-WE2	B B B	51.1/24.5 67.3/34.8 39.4/30.1
Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9	1530001941 159000680 1590001330 1510000771 1510000771 1510000771 1510000771 1530001941 1590001010	S.TR S.TR S.TR S.TR S.TR S.TR S.TR S.TR	2SC2712-BL (TE85L,F) DTC114EUA T106 DTA114EUA T106 2SA1586-GR (TE85R,F) 2SA1586-GR (TE85R,F) 2SA1586-GR (TE85R,F) 2SA1586-GR (TE85R,F) 2SA1586-GR (TE85R,F) 2SC2712-BL (TE85L,F) DTB113ZK T146	888888888	26.1/11 21.6/34.8 24.7/34.8 54.7/34.9 54.5/37.5 48.5/5.8 48.5/3.3 19.5/9.9 22.8/11
D1 D3 D4 D5 D6 D7 D9 D10 D11 D12 D16 D17 D18	179000950 175000940 175000940 175000940 175000940 175000940 175000940 175000940 175000940 175000940 1730002280 1730002280	S.ZEN S.DIO S.DIO S.DIO S.DIO S.DIO S.DIO S.DIO S.DIO S.DIO S.DIO S.ZEN S.ZEN S.ZEN	MA8056-M (TX) ISS400 TE61 MA8091-M (TX) MA8091-M (TX) MA8091-M (TX)	8888888888888	23.1/17 64.7/23.2 64.7/29.2 59.6/25.5 58.7/20.8 42.8/16.7 34.1/16.3 34.9/17.8 57.2/29 55.2/14.5 48.8/14.5 12.5/13.9
X1	6060000610	S.CER	EFOS4914E3	В	42.6/22.3
L1 L2	6200001520 6200001520	S.COL S.COL	MLF2012D R82K-T MLF2012D R82K-T	B B	12/28.9 10.7/13.9
R2 R3 R4 R5 R6 R7 R8 R9 R10 R11 R12 R13 R14 R15 R16 R18 R19 R22 R23 R24 R25 R27 R35 R36 R37 R38 R39 R40 R41 R42 R43 R44 R45 R46 R47 R48 R49 R48 R49 R49 R40 R40 R40 R40 R40 R40 R40 R40 R40 R40	70300004400 7030003400 7030003620 7030003560 7030003560 7030003560 7030003560 7030003400 7030003400 7030003560 7030003560 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003500 7030003400 7030003400 7030003440 7030003440 7030003440 7030003440 7030003440 7030003440 7030003440 7030003440 7030003440		MCR10EZHJ 1.5 k MCR10EZHJ 1.5 k MCR10EZHJ 1.5 k MCR10EZHJ 1.5 k ERJ3GEYJ 471 V (470) ERJ3GEYJ 333 V (33 k) ERJ3GEYJ 333 V (33 k) ERJ3GEYJ 123 V (12 k) ERJ3GEYJ 103 V (10 k) ERJ3GEYJ 102 V (1 k) ERJ3GEYJ 102 V (1 k) ERJ3GEYJ 103 V (10 k) ERJ3GEYJ 471 V (470) ERJ3GEYJ 471 V (470) ERJ3GEYJ 472 V (4.7 k) ERJ3GEYJ 103 V (10 k) ERJ3GEYJ 103 V (10 k) ERJ3GEYJ 472 V (4.7 k) ERJ3GEYJ 103 V (10 k) ERJ3GEYJ 224 V (220 k) ERJ3GEYJ 222 V (2.2 k) ERJ3GEYJ 102 V (1 k)	888888888888888888888888888888888888888	24.2/8.3 41.9/8.3 57.3/8.2 28.6/11.2 26.8/34.7 57.6/35.6 19.1/33.7 57.6/35.9 51.5/6.9 51.5/5.9 51.5/5.9 51.5/5.3 35.7/4.2 41.6/33.6 38.4/34.5 37.9/18.7 56.1/18.1 56/8.6 59.8/18.9 68.1/32.5 69.1/11.9 20.5/30.6 19.1/30.6 19.1/30.6 17.5/7.7 24.4/3 17/32.7 68.4/21.6 57.3/26.2 58.1/23.4 57.3/26.2 58.1/23.4 57.3/26.2 58.1/23.4 57.4/24.7
C1 C2 C5 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C21	4030006850 4510008500 4030007050 4030007050 4030007050 4030006860 4030006860 4030006860 4030006860 4030006860 4030006860 4030006860 4030006860 4030006860	S.CER S.ELE S.CER	C1608 JB 1H 471K-T EEE1CA101WP C1608 CH 1H 220J-T C1608 CH 1H 220J-T C1608 CH 1H 220J-T C1608 CH 1H 220J-T C1608 JB 1H 102K-T C1608 JB 1H 102K-T	88888888888888888	52/16.9 35.5/5.8 14.9/30.4 16.3/16.9 15.6/15.5 15.6/7.2 64.9/34.4 44.3/27.6 67.5/37.2 41.9/29.7 14.1/13.6 11.7/17.4 10.4/17.4 13/25.8

#### [MAIN UNIT]

REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATION
C22 C23 C24 C25 C26 C27 C29 C30 C31	4030006860 4030006860 4030006860 4030006860 4030006860 4030006860 4510008540 4510008540	S.CER S.CER S.CER S.CER S.ELE	C1608 JB 1H 102K-T C1608 JB 1H 102K-T EEE1CA100SR C1608 JB 1E 104K-T EEE1CA100SR	888888888	10.4/28.5 23.1/14 67.2/12.1 25.6/32.2 53/4.6 60.9/35.9 26.4/16 23/3 28.3/4.9
J1	6510023110	CNR	3008L-8P8C <kin></kin>		
DS1 DS2 DS3 DS4 DS5 DS6 DS7 DS8 DS10 DS10 DS11 DS11	5010000120 5010000120 5010000120 5010000120 5010000120 5010000120 5010000120 5010000120 5010000150 5040003160 5010000150 5040003160	S.LED S.LED S.LED S.LED S.LED S.LED S.LED S.LED S.LED S.LED S.LED	LN1371G-(TR) LT1EP53A BRPY1211C-TR LT1EP53A BRPY1211C-TR	T T T T T T T T T T	21.9/11 21.9/32 39.3/11 39.3/32 55.9/2.5 56.2/26.8 71.7/14.8 72.2/33.8 51.6/5 51.6/5 51.6/38
MC1	7700002310	МІС	EM-140		
S1	2260000980	sw	SKHHLP014A		
EP1 EP2 EP3 EP4	6910012350 6910012350 6910012350 6910012350		MMZ1608Y 102BT MMZ1608Y 102BT MMZ1608Y 102BT MMZ1608Y 102BT	В В В В	10.4/25.8 14.3/17.4 13/17.4 14.5/11

M.=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

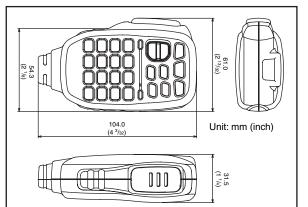
# • MECHANICAL PARTS [CHASSIS PARTS]

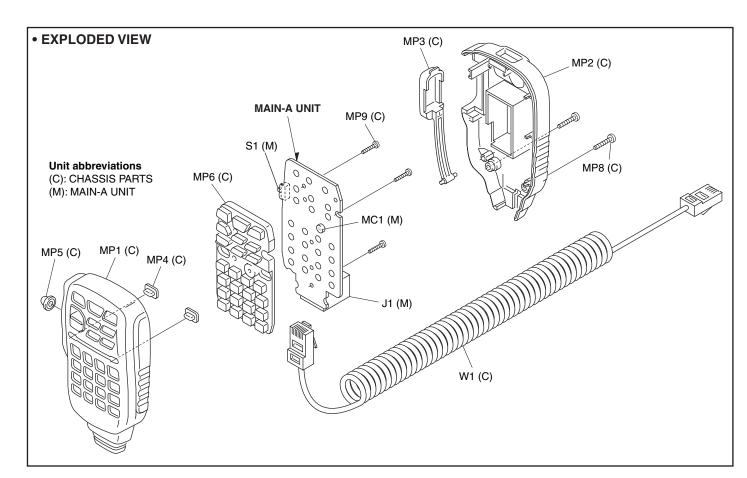
REF NO.	ORDER NO.	DESCRIPTION	QTY.
W1	8900011271	OPC-1153A	1
MP1 MP2		2539 FRONT PANEL 2539 REAR PANEL	1 1
MP3		2539 PTT BUTTON	i
MP4		2539 LED LENS	2
MP5		2539 SW RUBBER	1
MP6		2539 KEYBOARD	1
MP8	8810009371		2
MP9	8810009561	Screw BT B0 2X6 NI-ZK3 (BT)	3

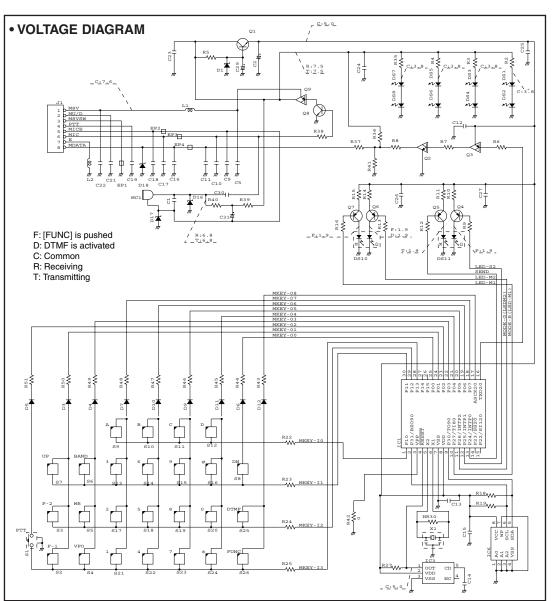
#### [MAIN-A UNIT]

REF NO.	ORDER NO.	DESCRIPTION	QTY.
J1	6510023110	3008L-8P8C	1
MC1	7700002310	EM-140	1
S1	2260000980	SKHHLP014A	1

#### • DIMENTIONS

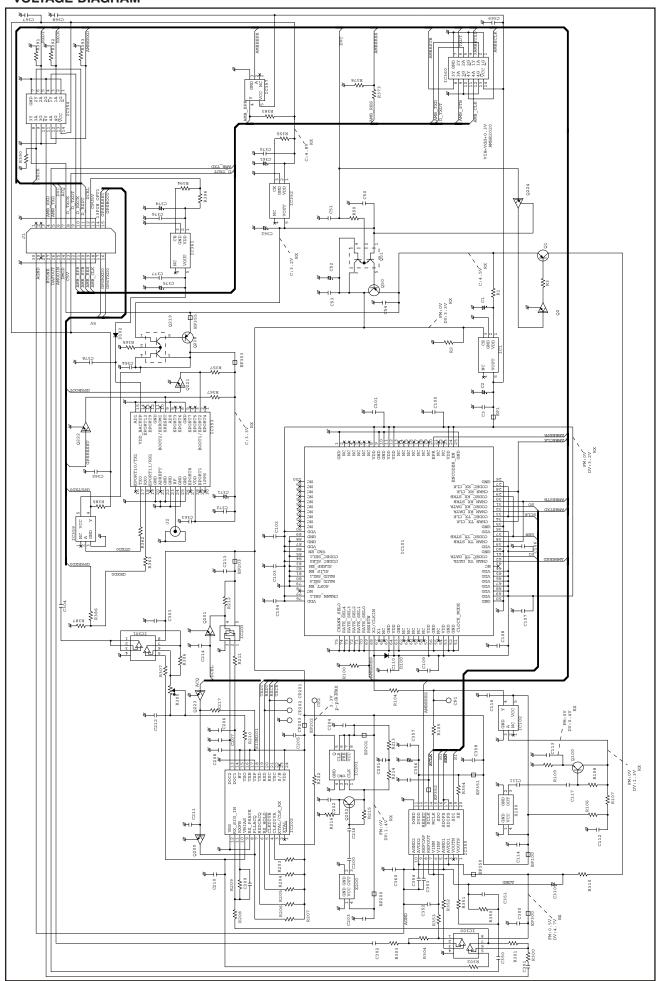






## **SECTION 12** UT-123 (Optional product)

#### • VOLTAGE DIAGRAM



12 - 1

#### • PARTS LIST

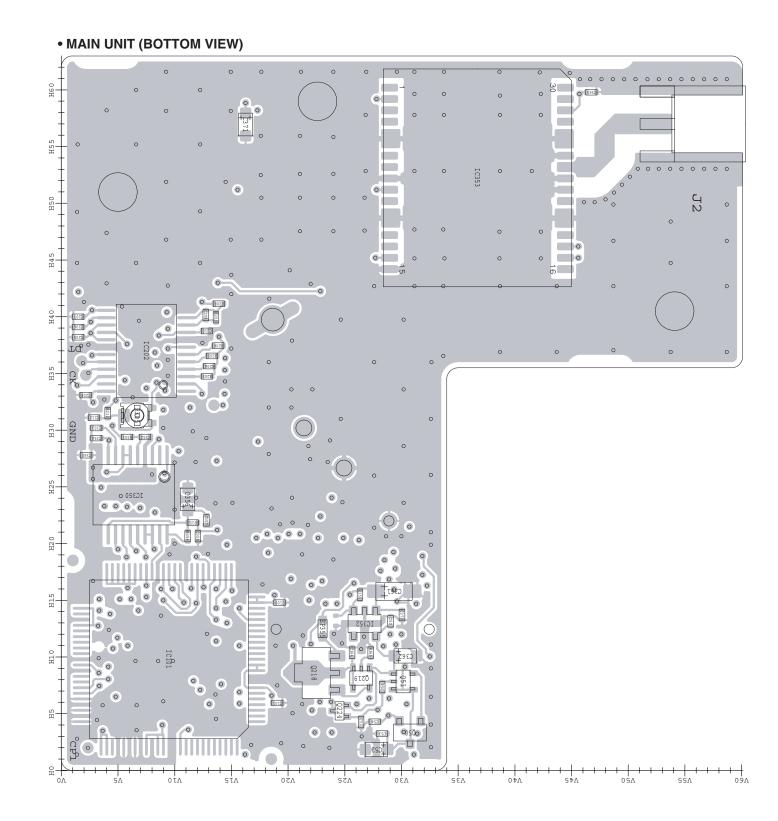
	UNIT]				
REF	ORDER		DESCRIPTION	М.	H/V
NO.  IC1 IC101 IC101 IC102 IC202 IC203 IC300 IC301 IC350 IC353 IC354 IC357 IC359 IC360 IC361	NO. 1180002371 1130010920 1130011930 1130013440 1110005430 1130007021 1110005290 1130006921 1130011631 1180002371 1190002470 1130013570 1130013570 1130013550 1180002371	S.REG S.IC S.IC S.IC S.IC S.IC S.IC S.IC S.IC	R1111N321B-TR-F AMBE-2020 SN74LVC1G04DCKR SN74LVC2G74DCTR CMX589AD5 TC7S66FU (TE85L,F) NJM2115V-TE1-#ZZZB TA75W01FU (TE12L,F) AD73311ARSZ R1111N321B-TR-F ITRAX130 <mrf> TC74VHCT125AFK (E,K) SN74LVC1G07DCK SN74LVC1G07DCK TC74VHC125FK (EL,K) R1111N321B-TR-F</mrf>	TBTTTBBBBTTTT	13/6.8 9.8/9.5 4.7/5.1 30.3/12.3 37/7.5 39.6/5.2 28.6/6.3 35.7/9.1 24.3/6.4 12.9/26.7 2.5/27.2 18.4/22.7 18.9/18.2 17.8/28.8 23.8/20.7
Q1 Q2 Q50 Q51 Q100 Q200 Q201 Q202 Q218 Q218 Q219 Q221 Q222 Q223 Q223	1510000581 1590003390 1510000581 1590001170 1530002280 1590003390 1590003390 1590003190 1590003390 1590003390 1590003390 1590003390	S.TR S.TR S.TR S.TR S.TR S.TR S.TR S.TR	2SA1362-GR (TE85R,F) UNR9215J-(TX) 2SA1362-GR (TE85R,F) XP1501-(TX). AB 2SC4081 T106 S UNR9215J-(TX) UNR9215J-(TX) 2SC4081 T106 S 2SB1123 T-TD-E XP1501-(TX). AB UNR9215J-(TX) UNR9215J-(TX) UNR9215J-(TX) UNR9215J-(TX) UNR915J-(TX)	T T B B T T T T B B T T T B	12/15.7 8.4/13.2 3.3/30.7 7.8/30.1 2.2/7.3 39/11.8 35.5/3.9 26.2/12.8 8.6/22.5 8.1/26.4 6/14.4 5.9/17.4 40.9/10.8 5.2/24.5
D100 D102	1790001240 1790001240	S.DIO S.DIO	MA2S728-(TX) MA2S728-(TX)	T T	8.1/2.1 27.9/20.1
X100 X200	6050012290 6050012300	S.XTL S.XTL	CR-820 (16.384 MHz) CR-821 (9.8304 MHz)	T T	7.9/8.4 21.5/11.8
R1 R2 R3 R3 R50 R100 R100 R100 R100 R100 R100 R100	703000180 7030005240 7030005240 703000590 703000590 703000590 703000590 703000590 703000590 7030005240 703000590	S.S.S.S.S.S.S.S.S.S.S.S.S.S.S.S.S.S.S.	MCR10EZHJ 22 (220) ERJ2GEJ 473 X (47 k) ERJ2GEJ 103 X (10 k) ERJ2GEJ 103 X (10 k) ERJ2GEJ 472 X (4.7 k) ERJ2GEJ 473 X (47 k) ERJ2GEJ 301 X (10 k) ERJ2GEJ 102 X (1 k) ERJ2GEJ 101 X (100 k) ERJ2GEJ 102 X (1 k) ERJ2GEJ 104 X (100 k) ERJ2GEJ 473 X (47 k) ERJ2GEJ 104 X (100 k) ERJ2GEJ 102 X (1 k) ERJ2GEJ 102 X (1 k) ERJ2GEJ 103 X (10 k) ERJ2GEJ 104 X (100 k) ERJ2GEJ 100 X (10 k) ERJ2GEJ 10	+++B++++++BBBBB+BBB+++++++++++++B+++++BBB+++B+++B++++	10.3/12.5 10/5.3 9.9/15.7 7.3/28.3 6.3/2.2 7/4.1 17.1/6.5 2.6/3.5 2.6/3.5 2.6/3.5 2.6/3.5 32.8/13.6 33.8/13.6 33.5/13.3 37.4/13.8 39.3/13.3 41.1/13.9 39.9/13.6 31.5/4.1 38.7/3.3 40.1/7.6 28.1/12.7 27.8/11.1 26.3/14.6 25.6/10.8 39.3/14.2 22.4/5.9 23.9/6.4 23.9/7.6 29.5/2.9 30.3/3.8 27.9/3.8 27.9/3.8 27.9/3.8 27.9/3.8 27.9/3.8 27.9/3.8 27.9/3.8 27.9/3.8 27.5/15.4 20.6/11.1 15.5/26.3 27.5/15.4 20.6/11.1 15.5/26.3 27.5/15.4 21.5/16.1 21.5/16.1 21.5/16.1 21.5/16.1 21.5/26.3 21
C1 C2 C3 C50	4550007680 4550007600 4030016930 4030017460	S.TAN S.TAN S.CER S.CER	TEESVP 0J 226M8R F920J106MPABMA ECJ0EB1A104K ECJ0EB1E102K	T T B	11.9/9.7 12.7/11.4 13.4/12.8 13.1/29

#### [MAIN UNIT]

REF NO.	ORDER NO.		DESCRIPTION	М.	H/V LOCATIO
C51	4030017460	S.CER	ECJ0EB1E102K	В	4.2/26.
C52	4550006930	S.TAN	TEESVP 0J 225M8R	В	1.8/27.
C53	4030017460	S.CER	ECJ0EB1E102K	B	3.2/28.
C54	4030017460	S.CER	ECJ0EB1E102K	В	4.3/27.
C100	4030017400	S.CER	ECJ0EB1A104K	В	14.8/19
C101	4030016930	S.CER	ECJ0EB1A104K	B	5.9/19
C102	4030016930	S.CER	ECJ0EB1A104K	<u>T</u>	5/8.8
C103	4030016930	S.CER	ECJ0EB1A104K	<u>T</u>	4/11.8
C104	4030016930	S.CER	ECJ0EB1A104K	T	3.4/2.2
C106	4030016930	S.CER	ECJ0EB1A104K	T	16.7/10
C107	4030016930	S.CER	ECJ0EB1A104K	Τ	17.6/10
C108	4030016930	S.CER	ECJ0EB1A104K	ΙĖΙ	16.8/5
				+	
C109	4030016930	S.CER	ECJ0EB1A104K		12.1/2.
C110	4030017420	S.CER	ECJ0EC1H470J	<u>T</u>	10.1/2
C111	4030017460	S.CER	ECJ0EB1E102K	<u>T</u>	5.6/10
C112	4030016930	S.CER	ECJ0EB1A104K	T	1.7/5.1
C113	4030016930	S.CER	ECJ0EB1A104K	T	1.7/9.4
C114	4030016930	S.CER	ECJ0EB1A104K	T	8.5/5.8
C116	4030016930	S.CER	ECJ0EB1A104K	<del>†</del>	5.1/2.7
C117		S.CER		<del>'</del>	
	4030017460		ECJ0EB1E102K		2.9/9.6
C200	4030017460	S.CER	ECJ0EB1E102K	<u>T</u>	22/14.1
C201	4030016930	S.CER	ECJ0EB1A104K	<u>T</u>	26.5/10.
C202	4030016930	S.CER	ECJ0EB1A104K	T	24.7/10.
C203	4030016930	S.CER	ECJ0EB1A104K	T	18.5/13.
C204	4030017460	S.CER	ECJ0EB1E102K	ΙĖΙ	32.5/12.
C205	4030016930	S.CER	ECJ0EB1A104K	<u>.</u>	38.2/1.
C206	4030010930	S.CER	ECJ0EB1A104K ECJ0EB1A273K	B	39.1/1.
C207	4030017030	S.CER	ECJ0EB1A273K	B	40/1.5
C208	4030016930	S.CER	ECJ0EB1A104K	B	33.1/2.
C209	4030017400	S.CER	ECJ0EC1H220J	B	40.1/12.
C210	4030018860	S.CER	ECJ0EB0J105K	В	38.7/12.
C211	4030017460	S.CER	ECJ0EB1E102K	T	40.5/14.
C212	4030017760	S.CER	ECJ0EB1H222K	Вİ	31.1/2.9
C213	4030016930	S.CER	ECJ0EB1A104K	+	39.5/8.
C214	4030017460	S.CER	ECJ0EB1E102K	<u>T</u>	33.9/3.9
C216	4030017460	S.CER	ECJ0EB1E102K	<u>T</u>	24.7/14.
C300	4030016930	S.CER	ECJ0EB1A104K	<u>T</u>	25.2/4.4
C301	4030018860	S.CER	ECJ0EB0J105K	T	22.4/4.3
C302	4030016930	S.CER	ECJ0EB1A104K	T	27.9/2.9
C303	4030016930	S.CER	ECJ0EB1A104K	ΙŤΙ	38.2/9.8
C304	4030017490	S.CER	C1608 JB 1A 105K-T	Ť	32.7/9.0
C310	4550007730	S.TAN	TEESVJ 0J 106M8R	+	24.9/2.
C350	4030016930	S.CER	ECJ0EB1A104K	<u>T</u>	23.5/8.8
C351	4030016970	S.CER	ECJ0EB1C223K	<u>T</u>	24.4/8.8
C352	4030016950	S.CER	ECJ0EB1A473K	B	29.4/7.4
C353	4030016930	S.CER	ECJ0EB1A104K	В	30.2/3.
C354	4030016930	S.CER	ECJ0EB1A104K	В	29.3/3.
C355	4030017420	S.CER	ECJ0EC1H470J	ΙŤΙ	18.2/8.8
C356	4550006930	S.TAN	TEESVP 0J 225M8R	Ь	23.9/11.
C357	4030016930	S.CER	ECJ0EB1A104K	В	22/12.8
C358	4030016930	S.CER	ECJ0EB1A104K	B	20.6/12
C360	4030017460	S.CER	ECJ0EB1E102K	B	27.8/2.2
C361	4550007090	S.TAN	TEESVA 1A 226M8R	В	15.8/29.
C362	4550007600	S.TAN	F920J106MPABMA	В	10.1/30.
C363	4030016790	S.CER	ECJ0EB1C103K	В	59.8/46.
C364	4030016790	S.CER	ECJ0EB1C103K	В	10.4/25.
C366	4030016790	S.CER	ECJ0EB1C103K	립티	20.5/23.
				+	
C367	4030016790	S.CER	ECJ0EB1C103K		1.3/32.
C368	4030016790		ECJ0EB1C103K	<u>T</u>	17.4/21
C369	4030016790		ECJ0EB1C103K	<u>T</u>	20.6/27.
C370	4030016790		ECJ0EB1C103K	B	13.7/30
C371	4550006930	S.TAN	TEESVP 0J 225M8R	В	56.9/16.
C372	4030016790		ECJ0EB1C103K	T	18.8/14.
C374	4550007600		F920J106MPABMA	Τİ	27.1/22
C375	4550007600		F920J106MPABMA	+	26.4/20.
C376	4030016790		ECJ0EB1C103K	<u>T</u>	24.8/24
C377	4030016790		ECJ0EB1C103K	<u>T</u>	24.5/18.
C378	4030017460	S.CER	ECJ0EB1E102K	Т	29.7/17
J1 J1	6510018440 6510025790		AXN430C330P AXN430C030S	T T	10.5/25. 10.5/25.
EP1	6910018460		MMZ1005Y102C-T	Ţ	14.6/9.7
EP100	6910018460		MMZ1005Y102C-T	T	8.5/4.9
EP200	6910018460	S.BEA	MMZ1005Y102C-T	T	20.1/13
EP201	6910018460		MMZ1005Y102C-T	Ť	27.9/14
EP202	6910018460		MMZ1005Y102C-T	+	37.1/4.
EP203	6910018460		MMZ1005Y102C-T	<u>T</u>	38.5/7.0
EP300	6910018460		MMZ1005Y102C-T	<u>T</u>	24.1/3.4
EP350	6910018460		MMZ1005Y102C-T	<u>T</u>	28.9/1.9
EP351	6910018460			B	21.8/11.
EP352	6910018460	S.BEA		T	17.1/7.
EP353	6910014690		MPZ1608S221A-T	T	20.9/15.
EP355	6910014690			В	12.5/23

=Mounted side (T: Mounted on the Top side, B: Mounted on the Bottom side) S.=Surface mount

# • MAIN UNIT (TOP VIEW) 9 B B6



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